DOCUMENT RESUME

ED 186 580 CE 021 513

TITLE	Occupational Education for Students with Special Needs: Automotive Maintenance.
INSTITUTION	Nassau County Board of Cooperative Educational Services, Westbury, N.Y.
SPONS AGENCY	New York State Education Dept., Albany.
PUB DATE	75
NOTE	320p.; For related documents see CE 021 512-529.
AVAILABLE FROM	Board of Cooperative Educational Services of Nassau County, Valentines Rd. and The Plain Rd., Westbury, NY 11590 ($5.00; index and 17 volumes, $75.00; handling charges: total set $10.00: individual documents, $2.50)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Auto Mechanics; Behavioral Objectives; Competency Based Education; Curriculum Guides; *Disabilities; Employment Potential; Hygiene; Interpersonal Competence; Job Skills; Learning Activities; Mainstreaming; Maintenance; Postsecondary Education; Secondary Education; *Special Education; Teaching Guides; *Trade and Industrial Education; Vocational Education

ABSTRACT

This curriculum resource guide on automotive maintenance is one of a series of seventeen specialized curriculum guides for occupational education of the marginal, handicapped, or special needs occupational education student. The guide begins with six behavior clusters that contain a series of forty-two instructional topics designed to teach job-required behavior skills in areas common to all employment: accuracy and productivity, initiative and perseverance on the job, positive response to direction and supervision, regularity and punctuality, self-reliance and reliability, and work tolerance. Learning activities and performance objectives are included for each topic. The remainder of the guide is comprised of job modules for the following: batteryman, brakedrum-lathe operator, brakeman, exhaust system parts changer, lubrication man, new car get-ready man, service station attendant, and shock absorber installer. Each job module begins with a job description followed by instructional activities and a performance objective for each of eighty-five instructional topics. Also included are appropriate personal appearance topics. (LRA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED186580

AUTOMOTIVE MAINTENANCE

BOARD OF COOPERATIVE EDUCATIONAL SERVICES OF NASSAU COUNTY
Division of Occupational Education, Division of Special Education, Westbury, New York

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
BOCES of
Nassau Co.
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE 021 513

BOARD OF COOPERATIVE EDUCATIONAL SERVICES OF NASSAU COUNTY

Mr. Richard L. Ornauer, President
Mr. Benjamin A. Demos, Vice President
Dr. Robert H. Bell, District Clerk
Mrs. Joan B. Brenner, Vice Clerk
Mr. Theodore F. Childs
Mr. George Farber
Mr. Milton Levine
Mrs. Henrietta B. Tuthill
Mr. Simeon A. Wittenberg

Dr. William T. Callahan, District Superintendent

Assistant Superintendents

Frank J. Wolff, Division of Occupational Education
Dr. Henry V. Colella, Division of Special Education
Dominick J. Mupo, Division of General Services
John J. Gormley, Division of Business and Management Services
Joseph A. Forte, Office of Superintendent

Assistant to the Superintendent

Charles W. Colangelo

Directors

Jack Tanzman, Division of Research and Development
Alfred Kratzert, Office of Information

Board of Cooperative Educational Services of Nassau County, New York 1975

FOREWORD

This book, one of a series of 17, was written and published in partial fulfillment of a long-standing commitment of the Board of Cooperative Educational Services of Nassau County — that is, to make occupational education available to any County resident who seeks it. The material in its pages should open a door that formerly was barely ajar.

For handicapped youth and adults, access to occupational education historically has been blocked — or at best, difficult. In recent years, however, the Nassau BOCES has sought to remove the traditional barriers. It has incorporated occupational and pre-occupational training elements into its special education programs. It has enrolled these pupils directly in its occupational education programs for the non-handicapped. And it has created new occupational education programs for students with special needs where none before existed.

This book, then, carries that effort a step further. It provides the teacher of occupational subjects with a new and different instructional tool — a tool particularly useful in the task of extending new educational opportunities to this population.

Through the use of this instrument, that task should be easier, the results more effective. And the handicapped student of whatever age should reap a benefit in the form of an additional degree of independence that his/her learning makes possible.

William T. Callahan
Executive Officer
Board of Cooperative Educational
Services of Nassau County

PREFACE

Students with special educational requirements form one of the most important challenges to public education.

Recently, education for the so-called special education or special needs student has been expanded to include intensive occupational education programming, recognizing that many, if not all, persons are employable and can be economically self-sufficient. The special needs individual who is capable, because of his preparation, of entering the work force, whether as a totally independent person or one whose occupational training can be used only under some form of sheltered situation, is an asset and a positive force in society.

As a result of a compelling need for relevant specialized occupational education curricula for these newly identified populations, Nassau BOCES submitted a curriculum development proposal to the State Education Department of New York State, which was subsequently funded through Public Law 90-576.

The proposal was directed to the development of 17 specialized curricula, focusing on occupational education for the marginal, handicapped or special needs occupational education student.

Three curriculum developers, assisted by a host of occupational and special education teachers, the Nassau BOCES Division of Research and Development, inputs from more than 400 industries, and representatives of the State Education Department, were involved in this effort. The occupational education curriculum development team observed the populations referred to in a variety of BOCES special and occupational education programs. The tasks the students performed, and the skills they displayed, were noted. In this way, and through coordinative involvement with occupational and special education teachers, the team became aware of the needs, as well as the capabilities, of the students as they related to potential job performance. The team then visited appropriate businesses and industries within the County to analyze skills needed in actual entry-level jobs. They also identified appropriate basic entry-level jobs within each major occupational field.

Based on data collected from all field observations, occupational education specialists were engaged to write suggested learning tasks. These were organized with other materials relating to job behavior and attitude, and constitute this Curriculum Guide.

In order to provide a comprehensive view of the entire series, a separate compendium of the tables of contents of all 17 books has been prepared. The titles of these books appear on page xvi. This compendium is available on request from Nassau BOCES.

The job titles selected for each guide are not meant to limit the future of any student. Rather, whenever appropriate, students should be prepared for a variety of entry-level positions within an occupation. If possible, all pupils should be made familiar with a variety of occupational situations that demand identical skills, and yet are representative of advanced opportunities in the world of work.

This Curriculum Resource Guide was made possible through the cooperation and support of BOCES administrators, guidance counselors, work experience coordinators, placement counselors, teachers from both our special education and occupational education divisions, research and development staff, and managerial personnel, plant foremen and employees from business and industry who provided materials and information, along with suggestions and recommendations.

We additionally wish to thank BOCES Technical Support Services for printing this series.

To those persons listed on the acknowledgment page who contributed directly to the text, and to the many others cited, we express our sincere appreciation.

CREDITS AND ACKNOWLEDGMENTS

Division of Occupational Education

Supervisors

Clarence R. Becker
Alexander Modderno
Francis J. Russo
Arthur Side

Project Supervisor

Clarence R. Becker

Project Coordinator

Aaron J. Schaeffer

Editorial Coordinator

Arlene B. Soifer,
Research and Development Div.

Project Field Staff

Robert Cicchetti
Bernard Gaughran
Jerome G. Schenkman, Research and Development Div.

Curriculum Resource Staff

Kenneth Caulfield
Louis Conetta
Albert Cowdell
Joan Grimaldi
Robert Hollis
Frank Horbert
Helen Houston
Shirley Nalley
Charles Peters
Joseph Schreiner
Jennifer Scruggs
Robert Stampf
Joan Whittle

Curriculum Advisory Team

Frank Blasio
Ronald Condron
James Fogarty
Phillip Forgash
Irving Goldberg
Lee Gould
Richard Kresse
Naomi Lubarski
Russell Riggio

Division of Research and Development, Resource Staff

Jack Tanzman, Director
Barbara Breen
Dr. Gene Gilmer
Theodore Illg
Arlene B. Soifer
Vivian Zwaik

Division of Special Education, Advisory Team

Dr. Henry V. Colella, Asst. Supt.
Ida Acunto
Dr. Thomas Feniger
Robert Haule
Dr. Emil Lombardi

DESIGN OF THE SERIES

In order to allow teacher (T) and student (S) as many options as possible, this entire curriculum series of 17 books is designed in a modular system; that is, basic tasks and behaviors as they occur in a given occupation or as they apply to several occupations, are grouped. The Job Module defines the technical skills and activities required in a particular entry-level job station. Within each job module are Instructional Topics which define the basic skills required in the job station work setting. A table of contents for this book follows at the end of this section, so that supervisors of occupational programs may determine alternate selections of occupational choices for students, as necessary.

Note: Any topic that deals with measurement that may require conversion to metric is flagged Mm in the table of contents.

Likewise, a modular approach is used for "survival," or job-required behavior skills, common to all employment. A series of Behavioral Instructional Topics appears at the front of every book.

TOPIC Identifying Oneself to Strangers

JOB-REQUIRED BEHAVIORS

SUGGESTED INSTRUCTIONAL ACTIVITIES:

Role Play #1 T plays both roles of stranger and student:
Stranger: Hello young man. . .Is this the (Office Practice Shop)?
Student: Yes.
Stranger: What is your name?
Student: (Mumbling last name): My name is (John Watson).
Stranger: John what?
Student: My name is (John Watson).

T discusses with class when and why strangers ask a person's name. T elicits from Ss remarks about what happens when someone mumbles, speaks too low or has speech difficulty.

Role Play #2 T role plays a stranger with each S, asking S's name. T reverses role with each S. Rest of the class observes and makes comments and suggestions.

At the conclusion of this section are a series of Behavioral Clusters and the appropriate behavioral instructional topics that support each cluster. The teacher may thus develop a plan which combines the use of technical skill and behavioral instructional topics as required by the particular job. Further, if the teacher finds that the student is deficient in a behavioral cluster, he/she may utilize one or more of the related behavioral instructional topics as remedial tools.

CLUSTERS

I Accuracy and Productivity	
Keeping Busy During Slow Periods	B4
Relationship with Supervisors	B11
Reporting to Supervisor or Person in Charge	B13
Sitting or Standing for Long Periods of Time	B16
Working Safely	B25
Working Under Pressure	B27
II Initiative and Perseverance on the Job	
Getting to School and/or Work	B1
Identifying Oneself to Strangers	B2
Keeping Busy During Slow Periods	B4
Reporting to Supervisor or Person in Charge	B13
Sitting or Standing for Long Periods of Time	B16
Working Alone	B20
Working in Crowded Areas	B21
Working in Public Areas	B23
Working Under Pressure	B27

The Job Description begins each module, telling WHAT student does; WHO student works with; HOW student is supervised; WHERE student works. Additionally, it sometimes includes unique requirements of the job such as physical strength, exceptional personal neatness or the wearing of a uniform. Job stations for each curriculum guide have been classified alphabetically, because often no rank order of difficulty can be established for these populations, for whom individual differences and desire to achieve a place in the world of work, may cause substantial diversity in performance.

JOB DESCRIPTION **COSMETICS ASSEMBLY-LINE WORKER**

A Cosmetics Assembly-Line Worker

- performs the following major tasks:
  - works with conveyor belts
  - handles labeling machines
  - works with glass bottles and jars
- works usually alongside and in coordination with other workers
- works under periodic supervision
- works in a large, well-illuminated factory-type area; may sit or stand at job station

Appropriate Instructional Topics appear in each job module. Each topic is separated by double lines. Topics have been arranged in logical task presentation and serve as the basic units of instruction. The Suggested Instructional Activities are the means used by the teacher to permit each student to gain mastery of the instructional topic. The specific topic names appear at the left, and the job module titles at the right.

TOPIC: Working with Labeling Machines (cont.) **COSMETICS ASSEMBLY-LINE WORKER**

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to operate hand-stamping labeling machine and automatic labeling machine by (1) setting labeling designations, (2) inking stamping plates, (3) labeling merchandise with hand-stamping machine, or producing adhering labels and stamping them on merchandise with automatic labeling machine. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Working with Glass Bottles and Jars

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S explains that glass bottles and jars must be handled carefully to avoid breaking or chipping them and that a cardboard or similar divider must be provided to separate them.

S selects a variety of glass bottles and jars from stock room.

S sorts bottles and jars by size and selects cartons of appropriate sizes into which to place them.

Many of the instructional activities also point up specific Safety Considerations.

S explains how to pick up and sweep up pieces of glass carefully if a bottle should break.

Safety Considerations: Handle broken glass carefully

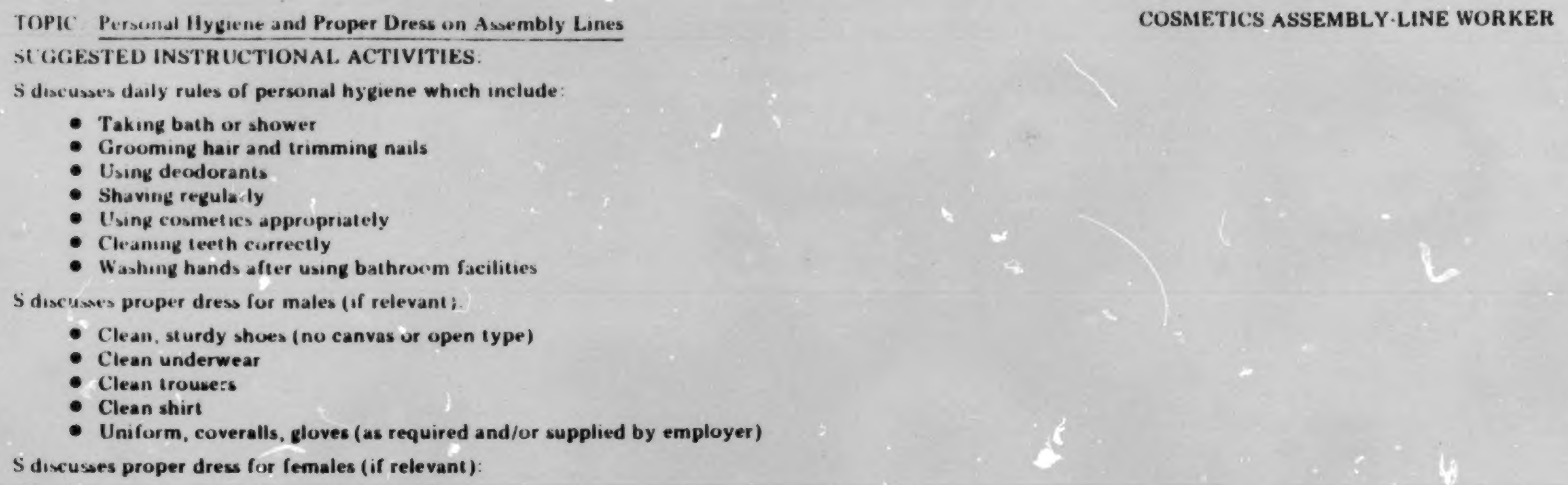
A complete Performance Objective appears at the end of each topic. The objective clearly specifies the observable behaviors which the student will learn and demonstrate as a result of the lesson of instruction, and the conditions under which he/she will perform it.

S explains how to pick up and sweep up pieces of glass carefully if a bottle should break.

Safety Considerations: Handle broken glass carefully

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) handle glass bottles and jars safely, (2) place them in cartons properly, and (3) pick up and sweep up glass fragments. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

Also included as part of each job module are appropriate personal appearance topics.



TOPIC: Personal Hygiene and Proper Dress on Assembly Lines

COSMETICS ASSEMBLY-LINE WORKER

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S discusses daily rules of personal hygiene which include:

- Taking bath or shower
- Grooming hair and trimming nails
- Using deodorants
- Shaving regularly
- Using cosmetics appropriately
- Cleaning teeth correctly
- Washing hands after using bathroom facilities

S discusses proper dress for males (if relevant):

- Clean, sturdy shoes (no canvas or open type)
- Clean underwear
- Clean trousers
- Clean shirt
- Uniform, coveralls, gloves (as required and/or supplied by employer)

S discusses proper dress for females (if relevant):

The teacher will be expected to identify and obtain the materials necessary for implementation of the instructional topics.

The teacher is further encouraged to expand the scope of suggested instructional activities presented herein, to include his/her most imaginative teaching methods, student application activity and student evaluation procedures, for the most effective presentation of the lesson.

In the final analysis, nothing can replace the knowledge and the expertise of the teacher in the particular skill being taught.

The teacher is urged to regard the module as a resource rather than a prescription for the exact method of teaching a lesson. A teacher's own professional understanding of the subject and of individual students will enable him/her to adopt appropriate methods for teaching the module content and helping each student to develop the indicated skill. The teacher's familiarity with the occupation will enable him/her to teach appropriate job behaviors and technical skills together, giving the student a more realistic sense of the world of work.

The success of the special education student in a program of occupational education will be largely dependent on the ability of the student to be adaptable to a variety of occupational situations. Learning the skills of several job modules would greatly increase his employability and options. The teacher should, therefore, regard this curriculum series as a guide toward providing the special education student with occupational education most suited to his/her learning disabilities, interests and capabilities. All students will thereby be permitted to advance to their greatest employable potential.

The following job-required clusters of behaviors have been derived: Accuracy and Productivity, Initiative and Perseverance on the Job, Positive Response to Direction and Supervision, Regularity and Punctuality, Self-Reliance and Reliability, and Work Tolerance. If the teacher finds that one or more of his/her students has a deficit in one of these behavioral clusters, he/she should refer to Behavioral Clusters and Their Related Behavioral Topics which appear on the following pages. The general job-required behaviors, preceded by roman numerals I-VI, are listed, along with their supporting topics of instruction.

BEHAVIORAL CLUSTERS AND THEIR RELATED BEHAVIORAL INSTRUCTIONAL TOPICS

- I Accuracy and Productivity
  - Keeping Busy During Slow Periods B4
  - Relationship with Supervisors B11
  - Reporting to Supervisor or Person in Charge B13
  - Sitting or Standing for Long Periods of Time B16
  - Working Safely B25
  - Working Under Pressure B27
- II Initiative and Perseverance on the Job
  - Getting to School and/or Work B1
  - Identifying Oneself to Strangers B2
  - Keeping Busy During Slow Periods B4
  - Reporting to Supervisor or Person in Charge B13
  - Sitting or Standing for Long Periods of Time B16
  - Working Alone B20
  - Working in Crowded Areas B21
  - Working in Public Areas B23
  - Working Under Pressure B27
- III Positive Response to Direction and Supervision
  - Relationship with Customers B9
  - Relationship with Supervisors B11
  - Reporting to Supervisor or Person in Charge B13
- IV Regularity and Punctuality
  - Getting to School and/or Work B1
  - Punctuality B5

V Self-Reliance and Reliability
  - Getting to School and/or Work B1
  - Identifying Oneself to Strangers B2
  - Punctuality B5
  - Relationship with Co-workers B7
  - Reporting to Supervisor or Person in Charge B13
  - Riding in Elevators B14
  - Riding on Escalators B15
  - Working Alone B20
  - Working in Crowded Areas B21
  - Working in Public Areas B23
  - Working Safely B25
  - Working Under Pressure B27

VI Work Tolerance
  - Keeping Busy During Slow Periods B4
  - Relationship with Co-workers B7
  - Relationship with Customers B9
  - Relationship with Supervisors B11
  - Reporting to Supervisor or Person in Charge B13
  - Sitting or Standing for Long Periods of Time B16
  - Working Alone B20
  - Working in Crowded Areas B21
  - Working in Public Areas B23
  - Working Under Pressure B27

Books in this series include:

- Automotive Maintenance
- Body and Fender Repair
- Building Maintenance
- Building Trades
- Distributive Services
- Electronic Assembly
- Floriculture
- Food Services
- Graphics
- Mechanical Assembly
- Office Services
- Ornamental Horticulture
- Packaging
- Personal Services, Health Oriented
- Personal Services, Housekeeping Oriented
- Plastics Manufacturing and Assembling
- Wood Products Assembly

TABLE OF CONTENTS

ii Board of Education

iii Foreword

v Preface

vii Credits and Acknowledgments

ix Design of the Series

xiv Behavioral Clusters

B-1 Behavioral Instructional Topics

B-28 Bibliography

1 Batteryman
- 2 Working in Automotive and Auto-Body Repair Occupations
- 3 Working with Industrial Chemicals
- 4 Loading and Unloading Hand-Operated and Mechanically Operated Dollies and Carts
- 5 Removing Battery Cable Clamps from Battery Posts
- 5 Cleaning Batteries, Battery Cable Terminals and Battery Cable Clamps
- 6 Removing and Replacing Battery Fasteners and Brackets or Clamps
- 7 Removing Batteries from Battery Carriers
- 7 Removing Corrosive Accumulations and Maintaining Battery Carriers
- 8 Installing New Batteries
- 8 Charging Batteries

9 Mm Moving Heavily Loaded Dollies and Carts
10 Loading and Unloading Trucks
11 Personal Hygiene and Proper Dress

12 Brake-Drum-Lathe Operator
13 Working in Automotive and Auto-Body Repair Occupations
14 Preparing Brake-Drum Lathe for Resurfacing Brake Drums
14 Mounting Front Hub-Mounted Brake Drum on Lathe in Preparation for Resurfacing
15 Mounting Rear Flange-Type Brake Drum on Lathe in Preparation for Resurfacing
16 Mm Resurfacing Frictional Surfaces of Brake Drums
16 Mm Removing Brake Drum from Lathe Spindle
17 Preparing Brake Drums for Grinding Off Heat Spots
17 Removing Heat Spots from Brake Drums
18 Cleaning Machinery
19 Personal Hygiene and Proper Dress

20 Brakeman
21 Working in Automotive and Auto-Body Repair Occupations
22 Mm Lifting Motor Vehicles
23 Removing and Replacing Wheels
23 Removing and Replacing Front Brake Drums
24 Working with Industrial Chemicals
25 Cleaning, Repacking and Adjusting Front Wheel Bearings
26 Removing and Replacing Brakeshoes of Internal Expanding Brakes on Front Wheels Without Automatic Self-Adjusters
26 Mm Measuring Brake Drums for Acceptability Under State Inspection Law
27 Inspecting Hydraulic Brake Lines for Leaks or Cracks
28 Mm Adjusting Brakes and Checking Fluid Level in Master Cylinder
28 Removing and Replacing Rear Brake Drums

29 Mm Inspecting Brake Wheel Cylinders for Leaks and Brake Linings for Required Thickness
30 Bleeding Brakes
30 Removing and Replacing Front Wheel Cylinders
31 Removing and Replacing Rear Wheel Cylinders
31 Reconditioning Wheel Cylinders
32 Loading and Unloading Trucks
33 Personal Hygiene and Proper Dress

34 Exhaust-System-Parts Changer
35 Working in Automotive and Auto-Body Repair Occupations
36 Removing and Replacing "U" Type Clamps
36 Removing and Replacing Exhaust System Hangers
37 Separating Sections of Exhaust Systems
37 Resizing or Reshaping Exhaust Connections for Refittings and Reinstallation
38 Removing and Replacing Tail Pipes
38 Removing and Replacing Mufflers and Resonators
39 Removing and Replacing Exhaust Pipes
39 Separating Exhaust System Sections with Special Hand Chisels
40 Separating Exhaust System Sections with Pneumatic-Powered Tools and Chisels
41 Loading and Unloading Trucks
42 Personal Hygiene and Proper Dress

43 Lubrication Man
44 Working in Automotive and Auto-Body Repair Occupations
45 Lubricating Grease Fittings of Moving Parts
45 Lubricating Hinges and Locks
46 Measuring Differential Lubricant Level
46 Completing Information on Lubrication Stickers
47 Cleaning Machinery

48 Loading and Unloading Hand-Operated and Mechanically Operated Dollies and Carts
49 Mm Moving Heavily Loaded Dollies and Carts
50 Personal Hygiene and Proper Dress

51 New-Car Get-Ready Man
52 Working in Automotive and Auto-Body Repair Occupations
53 Preparing to Wash Motor Vehicles Manually
54 Washing Motor Vehicles Manually
55 Drying Washed Motor Vehicles
56 Mm Hand-Waxing and Polishing Motor Vehicles
57 Cleaning Interiors of Motor Vehicles
58 Mm Sweeping and Mopping Floors and Walks
59 Personal Hygiene and Proper Dress

60 Service-Station Attendant
61 Working in Automotive and Auto-Body Repair Occupations
62 Handling Chemical Cleaning Agents
63 Filling Motor Vehicle Fuel Tanks
64 Opening and Closing Engine Hoods
64 Checking Oil and Fluid Levels Under Engine Hood
65 Cleaning Motor Vehicle Windows
65 Inflating Tires
66 Cleaning Machinery
66 Loading and Unloading Trucks
67 Loading and Unloading Hand-Operated and Mechanically Operated Dollies and Carts
68 Mm Moving Heavily Loaded Dollies and Carts
69 Stocking Shelves
69 Refilling Display Cases
70 Cleaning Toilet Bowls and Urinals
71 Cleaning Washbasins

72 Cleaning and Filling Washroom Dispensers
73 Mm Sweeping and Mopping Floors and Walks
74 Scraping Floors and Wood Surfaces
75 Mm Hosing Floors and Walks
76 Maintaining Service Station Exteriors and Service Areas
77 Care of Parking Areas
78 Personal Hygiene and Proper Dress

79 Shock-Absorber Installer
80 Working in Automotive and Auto-Body Repair Occupations
81 Removing and Replacing Front and Rear Shock Absorbers
82 Loading and Unloading Trucks
83 Loading and Unloading Hand-Operated and Mechanically Operated Dollies and Carts
84 Mm Moving Heavily Loaded Dollies and Carts
85 Personal Hygiene and Proper Dress

TOPIC: Getting to School and/or Work JOB-REQUIRED BEHAVIORS

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T makes a transportation list to aid his discussion of how each S gets to school and/or work and S's available alternate means of transportation.

T leads a discussion covering the following points:

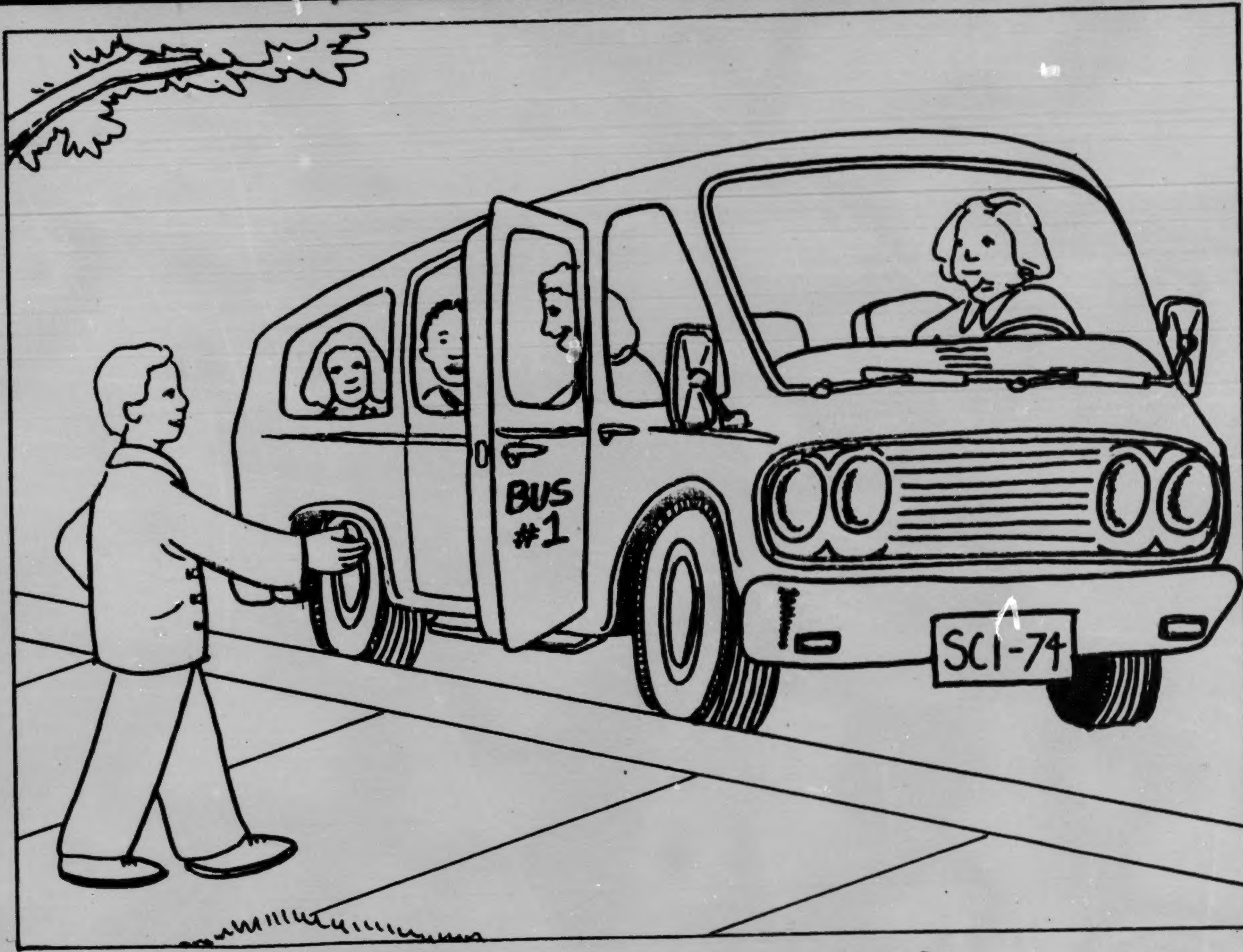
- S's means of getting to school and/or work
  Does S travel by bus alone? Does S arrive by bus with supervised group? Does S walk to school accompanied by others?
- S's personal experiences of getting to school and/or work
- reason for wanting to get to school and/or work
- similarity or difference of getting to school and/or work

T leads a discussion of alternate means of transportation for getting to school and/or work in inclement weather or under unforeseen circumstances.

T questions each S individually about alternate means of travel and clarifies S's regular and alternate means of travel.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to arrive at school and/or work regularly, independent of weather conditions or unforeseen circumstances.

Note: T will evaluate periodically whether S continues to manifest these behaviors.


BUS
#1
SCI-74

TOPIC: Identifying Oneself to Strangers

SUGGESTED INSTRUCTIONAL ACTIVITIES:

Role Play #1: T plays both roles of stranger and student:
Stranger : Hello young man...Is this the (Office Practice Shop)?
Student: Yes.
Stranger: What is your name?
Student: (Mumbling last name): My name is (John Watson).
Stranger: John what?
Student: My name is (John Watson).

T discusses with class when and why strangers ask a person's name. T elicits from Ss remarks about what happens when someone mumbles, speaks too low or has speech difficulty.

Role play #2: T role plays a stranger with each S, asking S's name. T reverses role with each S. Rest of the class observes and makes comments and suggestions.

Role Play #3: Before beginning this role play of giving one's address to another person, T determines that each S either knows his address or carries a card with his name, address and telephone number. T role plays a stranger and asks a S his name, then questions S about his address, and also role plays a S who gives his name to a stranger and then shows his address card.

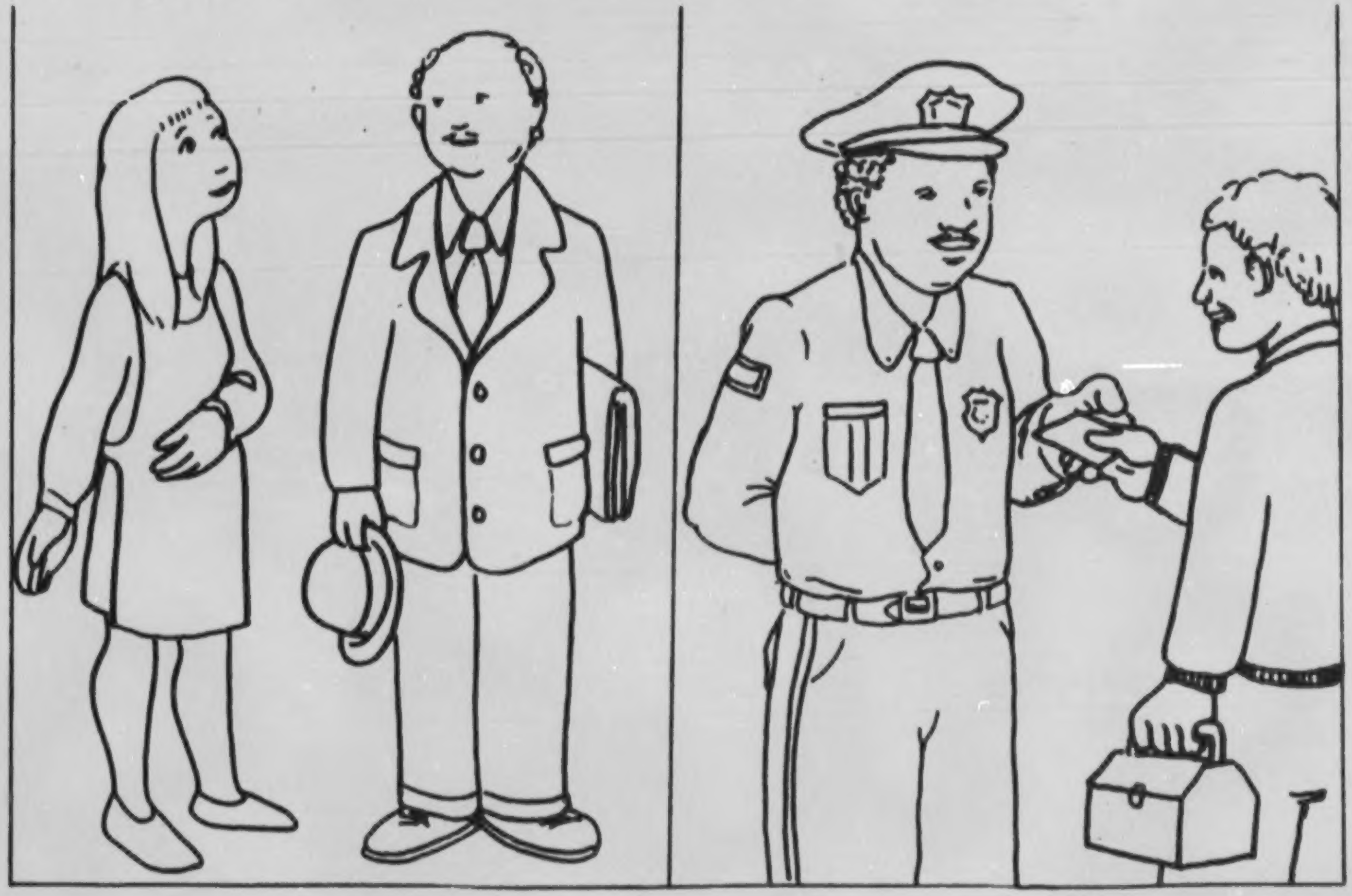
T directs discussion to elicit comments on giving one's name and showing one's address card. T then has Ss show their cards and elicits comments from those who know their address but don't have cards. These comments should lead into the next role play.

Role Play #4: T structures a role play of telling a stranger one's name and address. After all Ss capable of telling their address have practiced, T continues the role play, varying the performance of the card-carrying and verbalizing Ss.

TOPIC: Identifying Oneself to Strangers (cont.)

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to (1) say his name intelligibly and (2) either tell his address or exhibit an identification card.

Note: T will evaluate periodically whether S continues to manifest these behaviors.



TOPIC: Keeping Busy During Slow Periods

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T assigns each S a task, purposely giving heavier work loads to some. T observes Ss unobtrusively and watches for those who finish first and waits for those who finish last.

T asks Ss why some took longer than others, directing discussion to have Ss discover that difference in work loads is the reason.

T asks Ss how the job could have been finished sooner. Ss should realize at end of discussion that, when finished ahead of others, they should seek supervisor's direction and help those who have not yet completed their tasks.

T asks Ss to explain why a worker gets paid, directing discussion to reveal phrases about importance of being as productive as possible and of doing a good job. T then asks Ss what a worker should do when finished with an assigned task.

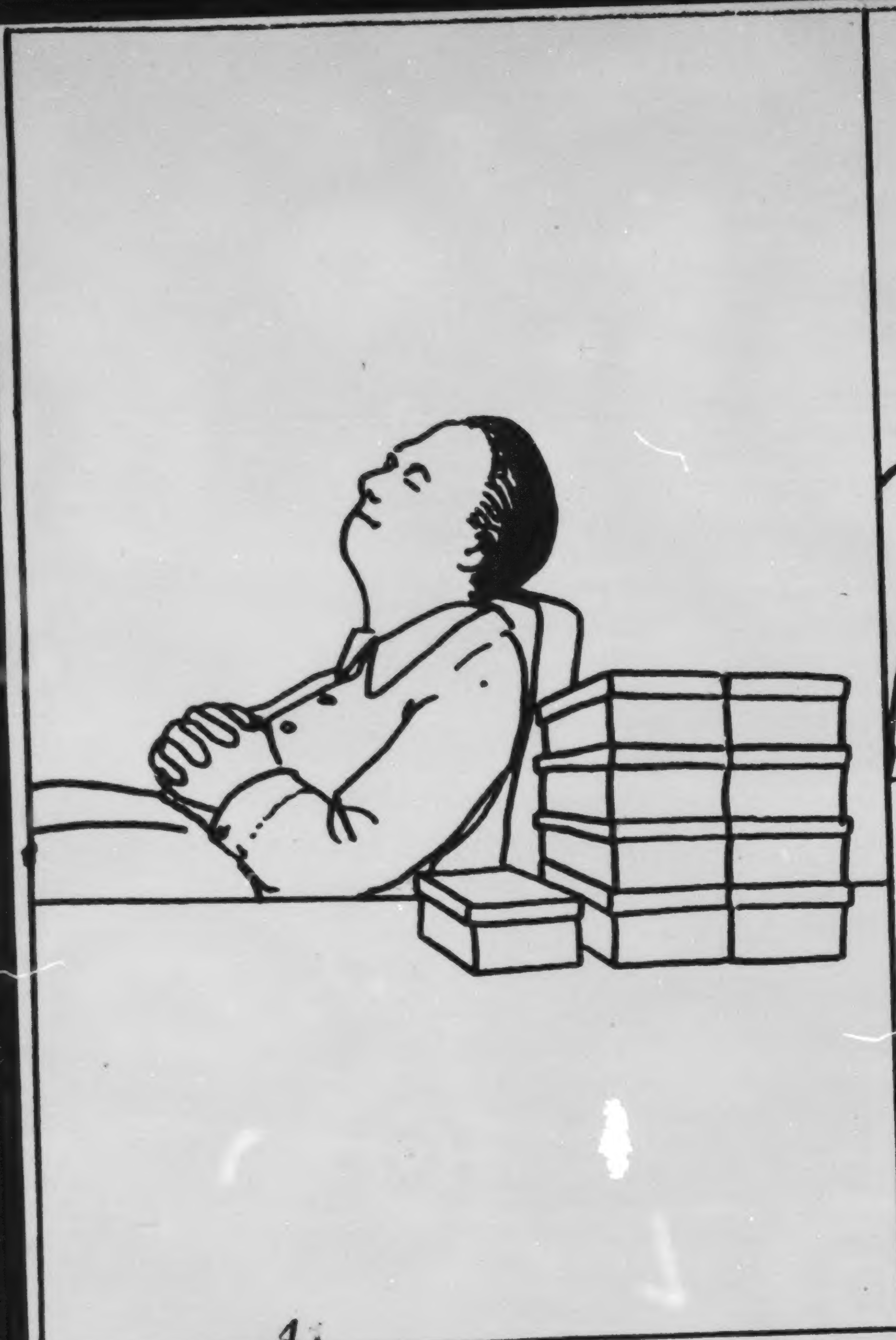
T elicits from Ss the information that worker should report to supervisor for a new assignment. Also, worker can ask permission to help co-worker who has heavier work load.

T outlines simple work situation, comparing busy, cooperative worker with one who is idle, and asks Ss which one will be employed longer.

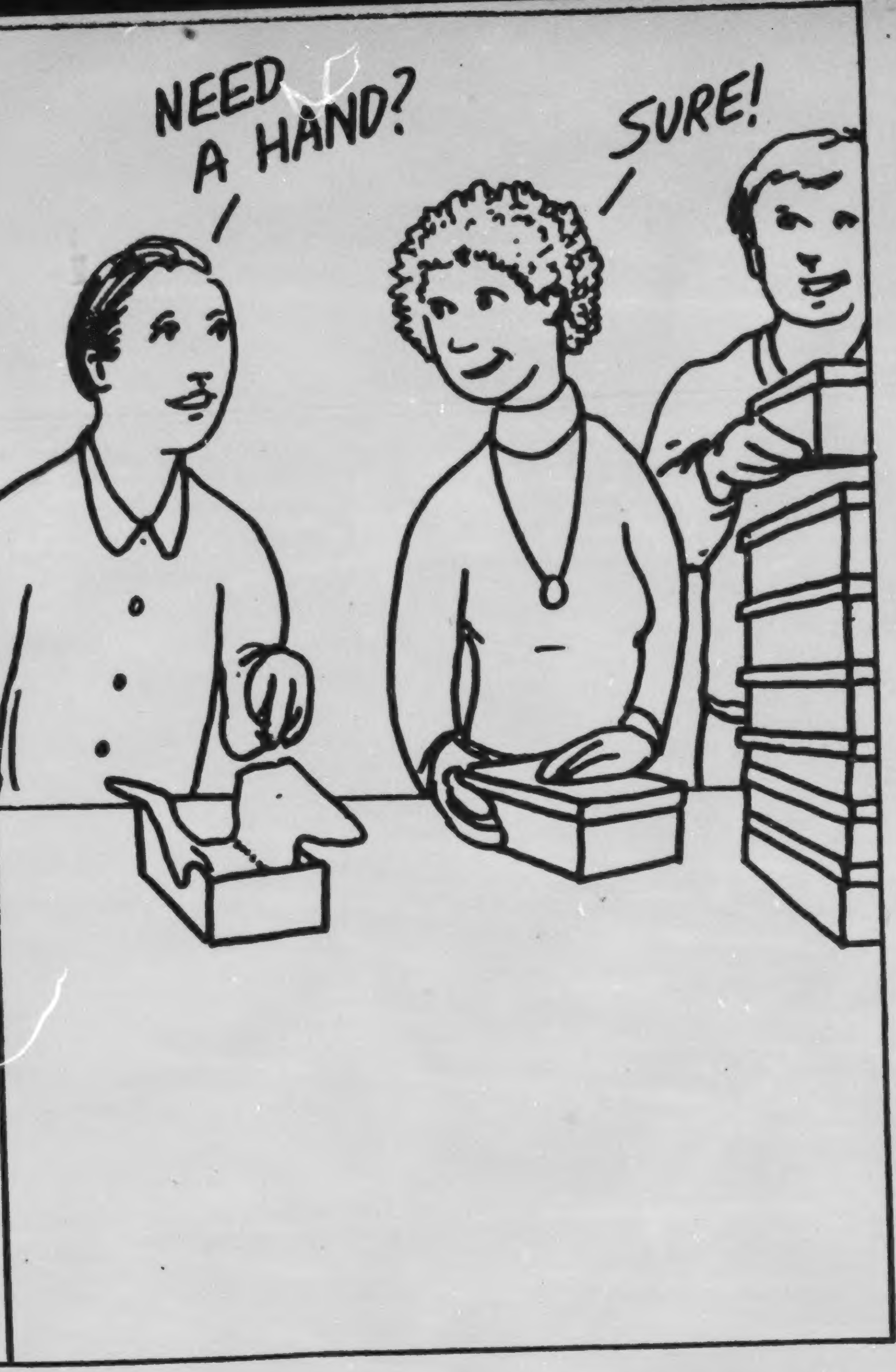
T repeats learning sequence by randomly assigning unequal tasks, by observing Ss behavior and by having Ss discuss their feelings and thoughts about keeping busy during slow periods.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to (1) keep busy, (2) ask supervisor for additional work after finishing assigned task, and (3) assist others.

Note: T will evaluate periodically whether S continues to manifest these behaviors.



41


NEED A HAND?
SURE!

42

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T shows picture of people at work in a given trade. Ss identify activities.

T asks Ss why people work and encourages Ss during discussion to develop definition of a "working day."

T, comparing school hours to a working day, talks of importance of arriving punctually at school and after taking classroom breaks or lunch breaks, and asks for comparison between class hours and hours on a job.

T asks Ss to relate why it is important for workers to arrive on time, directing discussion to such words as "dependability," "good worker," "cooperation."

Role Play #1: T, with three Ss (S1, S2, S3), sets up simple task, requiring each S to do his share. T, after a short time, suggests that S2 leave activity. S1 and S3 must then complete task.

T asks class how others are affected by a tardy or frequently absent worker. T directs discussion in order that Ss understand that two workers must work harder to complete task assigned to three.

T questions class as to why when there is less work to do, one worker will retain his job while another will be fired.

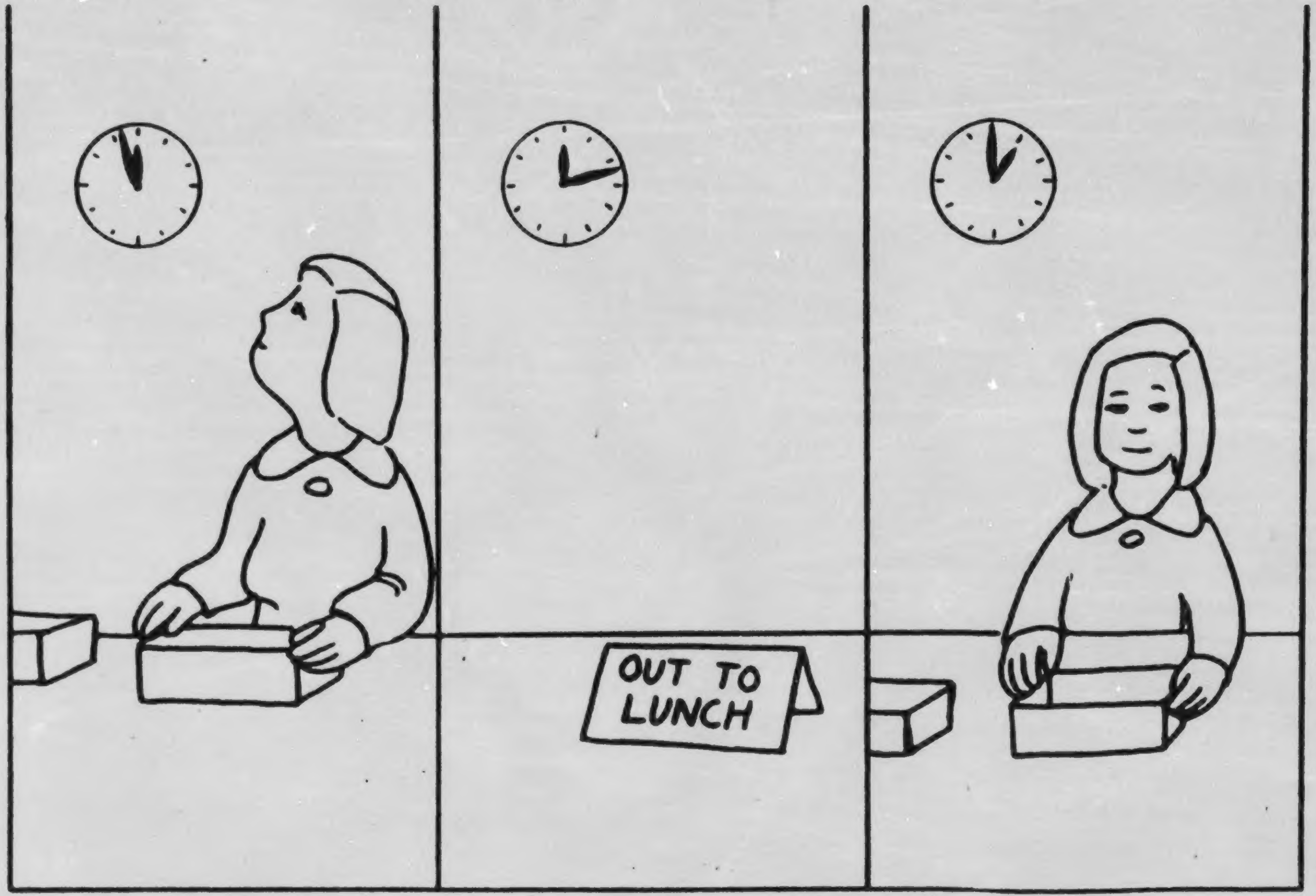
T asks class about what a worker should do when he must be absent or will be late getting to work. T elicits from Ss remarks about importance of telephoning company.

Role Play #2: T, using teletrainer unit and assigning a S to each role, sets up the following situation: worker calls in and explains why he will be late or absent; supervisor asks how late worker will be or when he will be able to return to work. T suggests proper phrasing and repeats exercise. Ss take turns playing different roles.

TOPIC: Punctuality (cont.)

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to (1) arrive on time, (2) return from breaks on time, (3) return from lunch on time, (4) return from assigned tasks without wasting time, and (5) call in when sick or late.

Note: T will evaluate periodically whether S continues to manifest these behaviors.



TOPIC: Relationship with Co-workers

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T performs a three-part task, illustrating and emphasizing relationship of each part to whole task.

T initiates a discussion of Ss' experience with team work.

T assigns three-part task to three Ss (S1, S2, S3). T instructs S1 to complete only his part of task. Task passes to S2, and then to S3. Remainder of class observes.

T, when assignment is completed, initiates discussion among observers to evoke reaction of team to such terms as "blame," "tattle," "sulkiness." T corrects as reactions occur.

T demonstrates correct way in which team should work, performing S1's part for a short time, then S2's and then S3's.

Ss repeat routine until cooperation occurs.

T explains to Ss necessity of performing individually assigned tasks, regardless of co-worker's assignment.

Three Ss are assigned separate functions; T observes reactions as one S finishes before others.

T, when task is completed, initiates discussion among class to elicit comments about S's behavior--who finished first, second or third. T observes individual's reaction to discussion and corrects as necessary.

T stresses necessity of performing each assigned task industriously, without unnecessary conversation. T also impresses upon Ss the need to report to supervisor when finished.

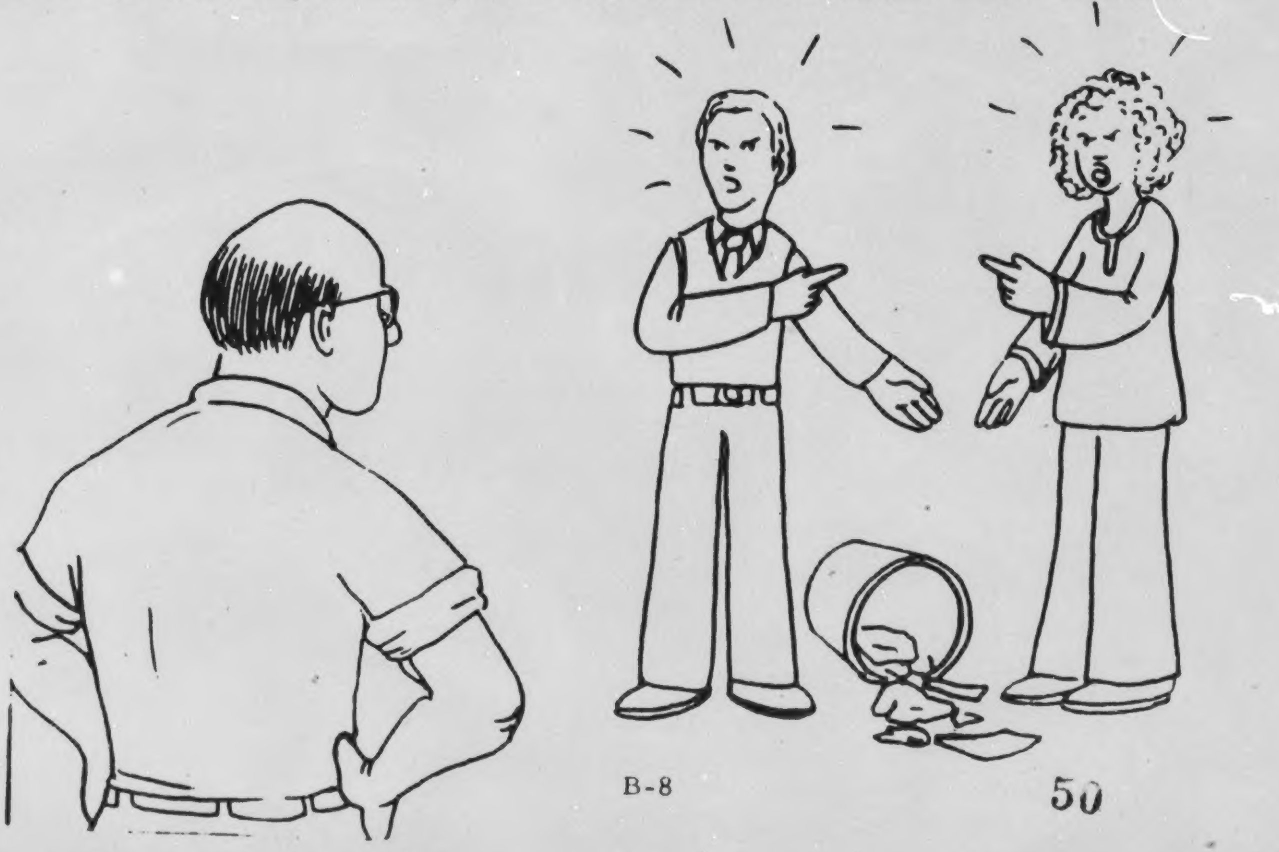
TOPIC: Relationship with Co-workers (cont.)

T instructs Ss how to communicate and behave with co-workers in work situation. T encourages Ss to participate in role playing. T observes and corrects Ss' performances.

T encourages Ss to suggest how to communicate and cooperate in interpersonal relationships.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to work (1) individually and (2) cooperatively in a team as directed, (3) without excessive talking, and (4) without sulking, blaming or tattling.

Note: T will evaluate periodically whether S continues to manifest these behaviors.



TOPIC: Relationship with Customers

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T exhibits pictures of occupational situations which depict relationship of customers to salesperson, or customers to other service personnel. T asks for identification of roles in each picture and elicits definition of the term "customer" from Ss.

T evokes information from Ss regarding customers' needs, function of worker serving customers, and manner in which worker provides service.

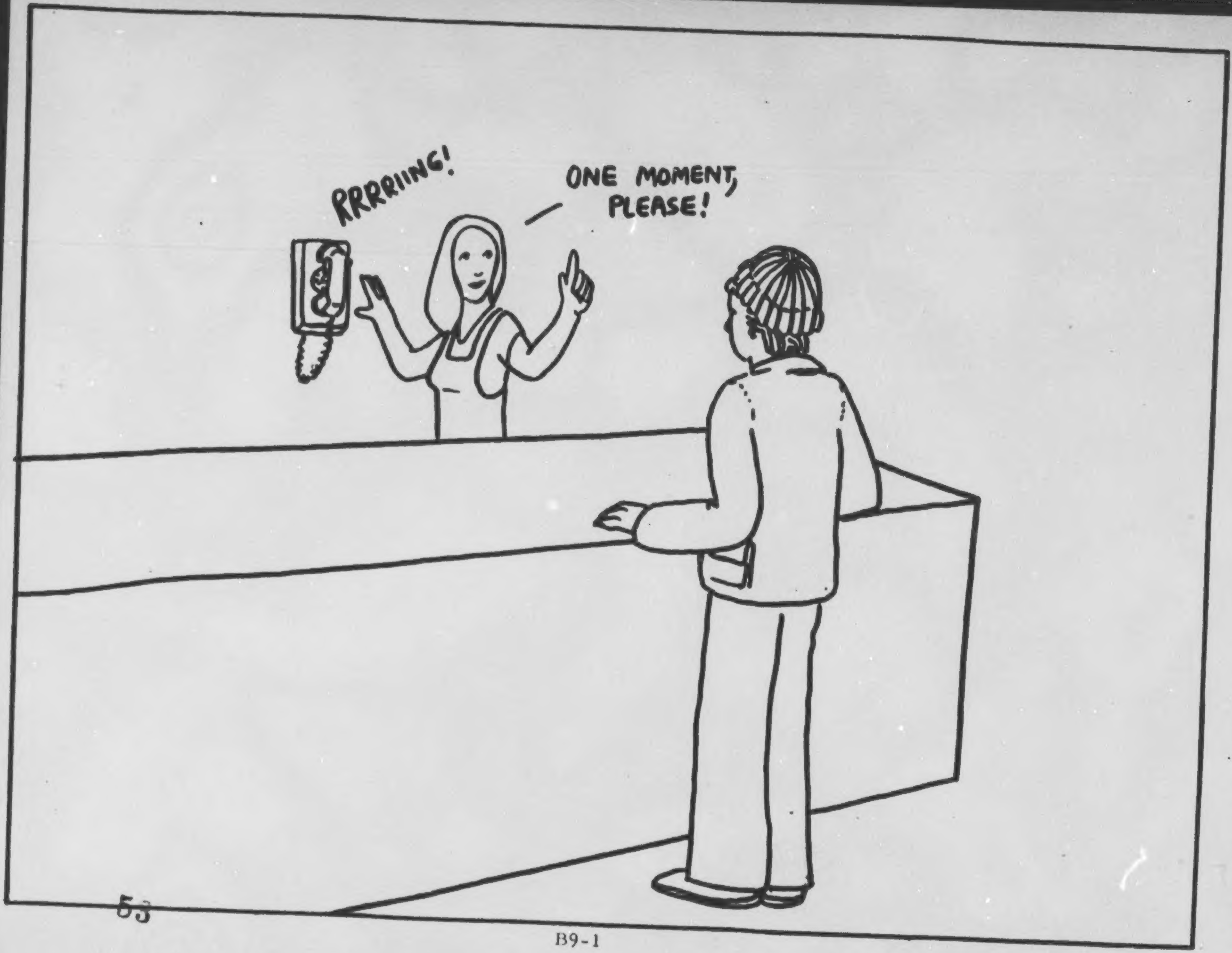
T directs discussion to point out that a business cannot proper unless customers purchase services or goods. Ss, during discussion, also perceive why customers prefer one place to another.

Role Play #1: T asks Ss to role play service personnel, while T plays customer. Remainder of class observes. Suggestions for improvement of service are solicited by T from Ss and corrections are made. T reverses roles: T becomes service person and Ss take roles of customers. Finally, Ss play both customer and worker role.

T discusses with Ss how service personnel should greet customers, answer their questions, direct them to other service workers, or ask them to wait.

Role Play #2: T and Ss role play a situation in which the customer comes into the store and asks a clerk for "Mr. Jones," the manager. The customer is told to wait a few minutes and is asked to sit down. T plays clerk and S plays customer. Remainder of class observes. The role is replayed by all the Ss. After each role play, T discusses and criticizes with class participants' performance of target behavior.

In further discussions, Ss perceive that correct telephone manners play an important role in sound customer and service personnel relations.


RRRRIING!
ONE MOMENT, PLEASE!

T assigns Ss to a work station from which Ss must assist entering customers. T, after observing Ss' performances, determines which role play to choose for further learning and practice situations.

Role Play #3: Using teletrainer unit, T outlines a simple activity, such as a customer calling for information. Ss act out situation, using proper greetings or responding as required. T stresses importance of articulate speech and mature behavior. T rotates exercise so that all Ss have a chance to participate.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to (1) greet a customer, (2) identify his needs, (3) assist him as required, or (4) refer him to another service worker.

Note: T will evaluate periodically whether S continues to manifest these behaviors.

TOPIC: Relationship with Supervisors

SUGGESTED INSTRUCTIONAL ACTIVITIES:

Role Play #1: T outlines simple work situation in which classroom is used as work setting. T assigns a pair of Ss to each work station. T plays role of supervisor, Ss play workers. Remainder of class observes.

T elicits from Ss definitions of "supervisor's" and "worker's" roles and relationship.

T repeats role play with each pair of Ss.

Role Play #2: T, as supervisor, assigns short-term, separate tasks to first pair of Ss. Class observes workers' responses and actions.

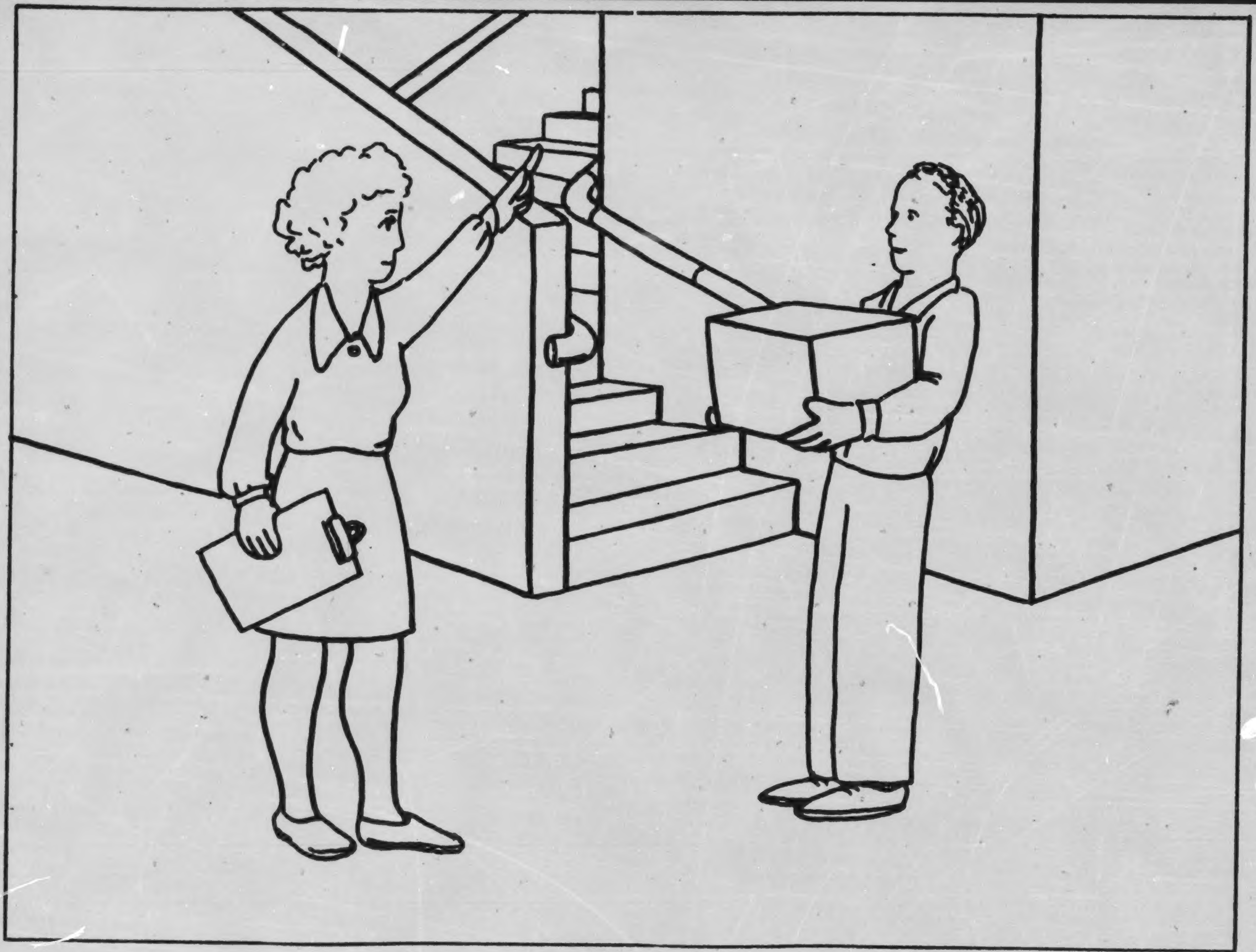
T praises good work, asks for suggestions from class to correct workers' reactions and responses to supervisor's instructions.

T elicits following suggestions from class about what worker should do when:

- he doesn't know how to perform an assigned task
- he doesn't know whether supervisor may be interrupted to answer employee's question; T should emphasize correct process used
- he needs help and supervisor is absent
- he advises supervisor that task has been completed

T and Ss review and discuss all steps.

Lesson is repeated with two different Ss playing workers until all Ss have played role of worker.



Lesson is then repeated with another S playing role of supervisor.

T leads discussion of supervisor's and worker's roles and relationship.

Role play is repeated until each S has played supervisor.

T assigns short-term tasks to Ss, giving them specific instructions as to procedure. T makes notes on all Ss' performance in terms of target behaviors.

T leads Ss in discussion of how well they thought they approached target behavior and clarifies any misperceptions S may have.

T reinforces S's use of target behavior.

T repeats previous learning sequence by reassigning tasks and by discussing Ss' perception of roles until they regularly demonstrate target behaviors.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to (1) accept supervision, (2) follow instructions, (3) work steadily until assignment is completed, and then (4) report to person in charge.

Note: T will evaluate periodically whether S continues to manifest these behaviors.

TOPIC: Reporting to Supervisor or Person in Charge

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T shows Ss a film which depicts a worker and supervisor relationship.

T elicits Ss' responses to film and determines whether Ss clearly understand worker and supervisor relationship.

T questions Ss about the behavior that will be expected of them when they are employed. T directs discussion to have Ss remark upon necessity of reporting to supervisor or person in charge as directed (1) after having been hired, (2) when coming to work, (3) after punching time card, and (4) while awaiting supervisor.

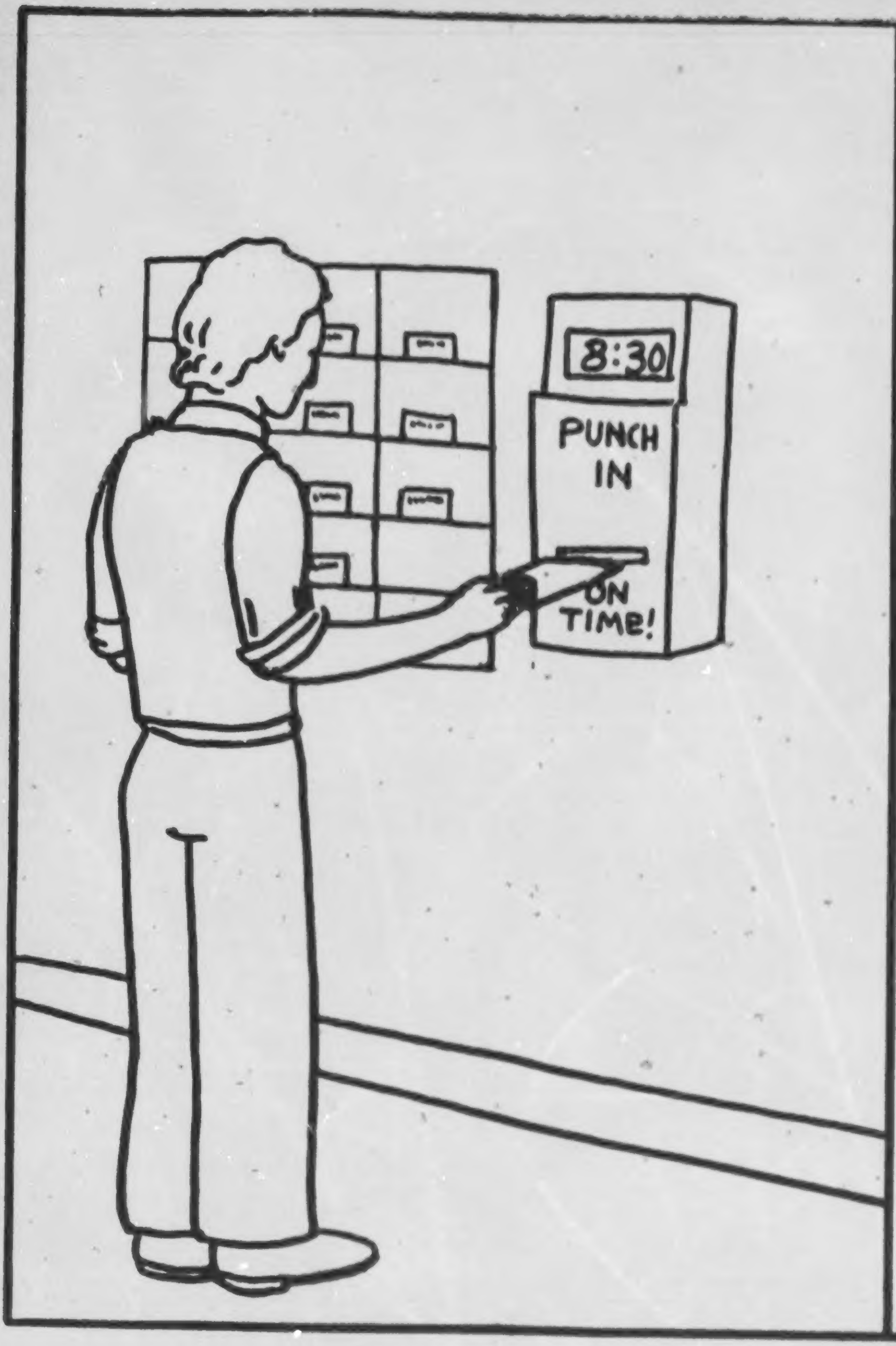
T discusses with Ss what worker should do when he has finished his assigned task. S responds either True or False:

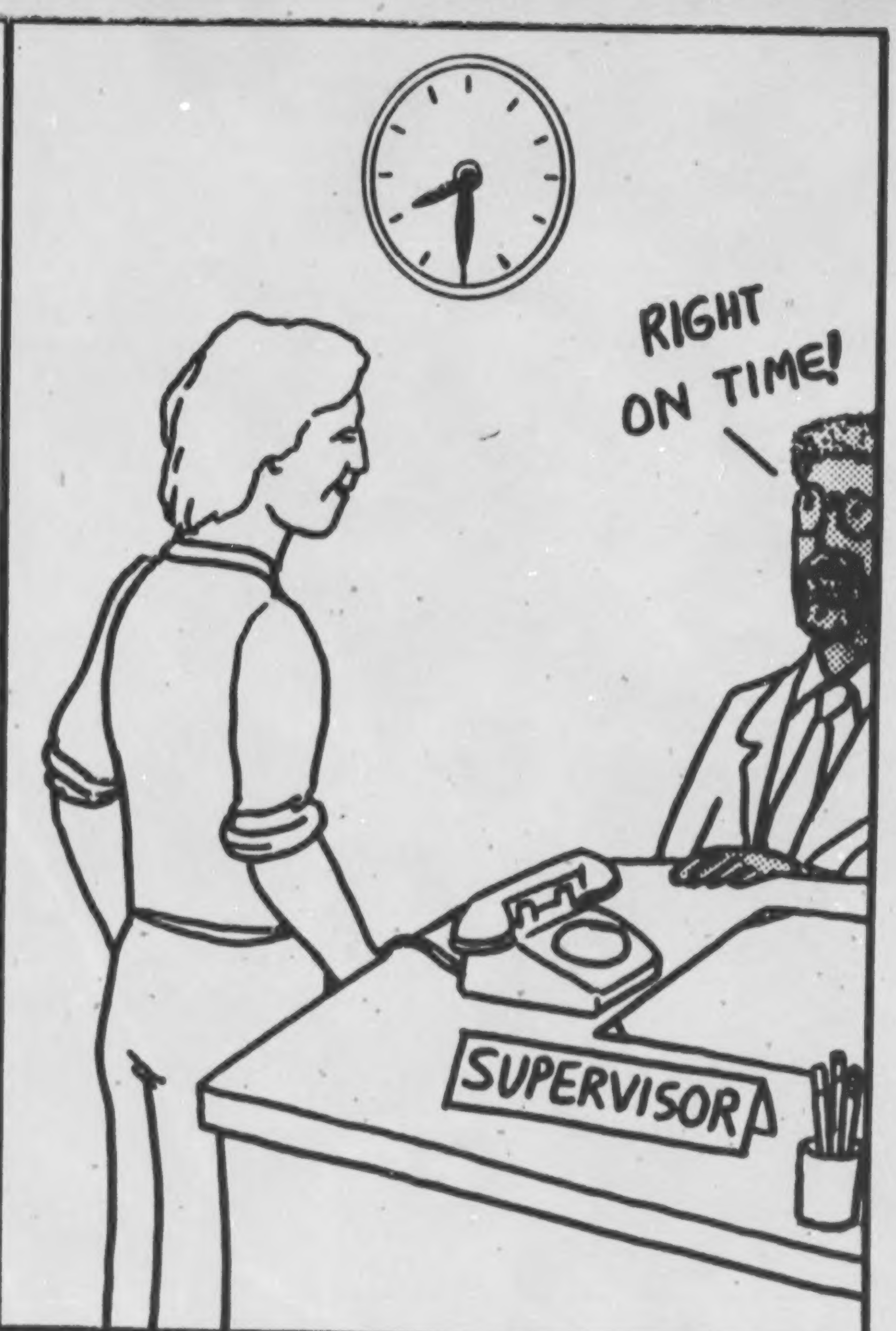
- ask supervisor whether there is additional work to do
- question co-worker whether there is additional work to do
- ask to share co-worker's work
- tell other co-workers what to do

T evaluates answers, seeking each S's understanding of his own sense of responsibility and of his decision making ability. T then clarifies, if necessary, and stresses that S should not report to persons other than his immediate supervisor.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to (1) report only to supervisor or person in charge, (2) upon arrival, (3) after completing assigned task, and then (4) await supervisor at work station.

Note: T will evaluate periodically whether S continues to manifest these behaviors.


8:30
PUNCH IN
ON TIME!


RIGHT ON TIME!
SUPERVISOR

TOPIC: Riding in Elevators

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T demonstrates how to step into elevator, avoid tripping, move to back of car, turn around to face front and leave. T stresses safety factors: making sure before boarding that doors are completely open, that car is level with floor outside, and that all passengers who are getting off have done so.

Ss take turns stepping into elevator, following instructions on where and how to stand.

With all Ss facing front in elevator, T demonstrates how to push buttons for floor selection.

Ss, one at a time, call out floor numbers and push buttons according to instruction.

T demonstrates to Ss how to leave car, stressing safety factors: waiting until door is completely open and car is level with floor before leaving elevator.

Ss take turns calling out floor numbers and push buttons according to instructions. When elevator arrives at given floor, Ss leave safely.

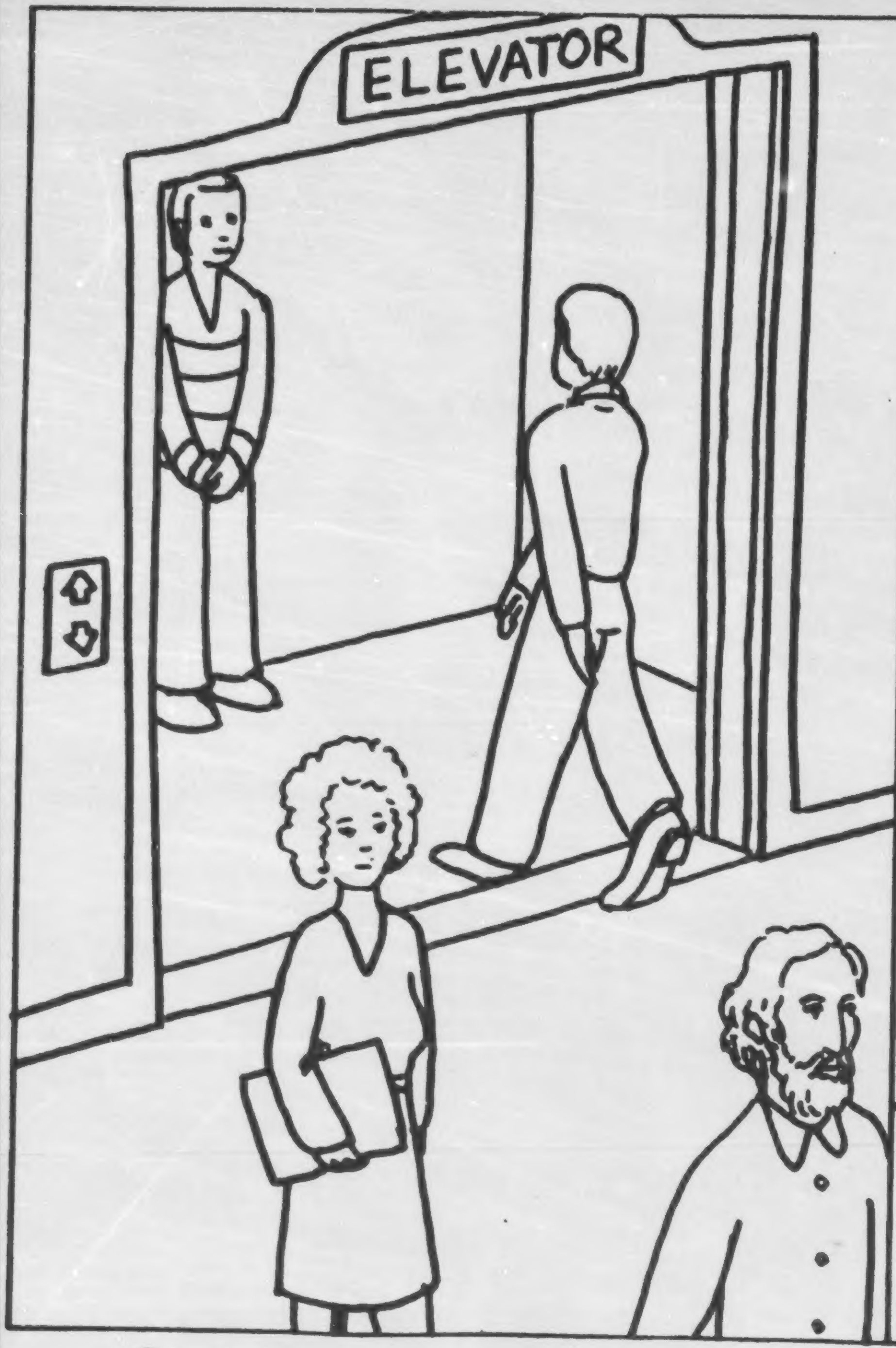
T demonstrates to Ss how to inform elevator operator of floor to which they wish to go.

Ss practice informing the operator or T, who acts as operator, of desired floor.

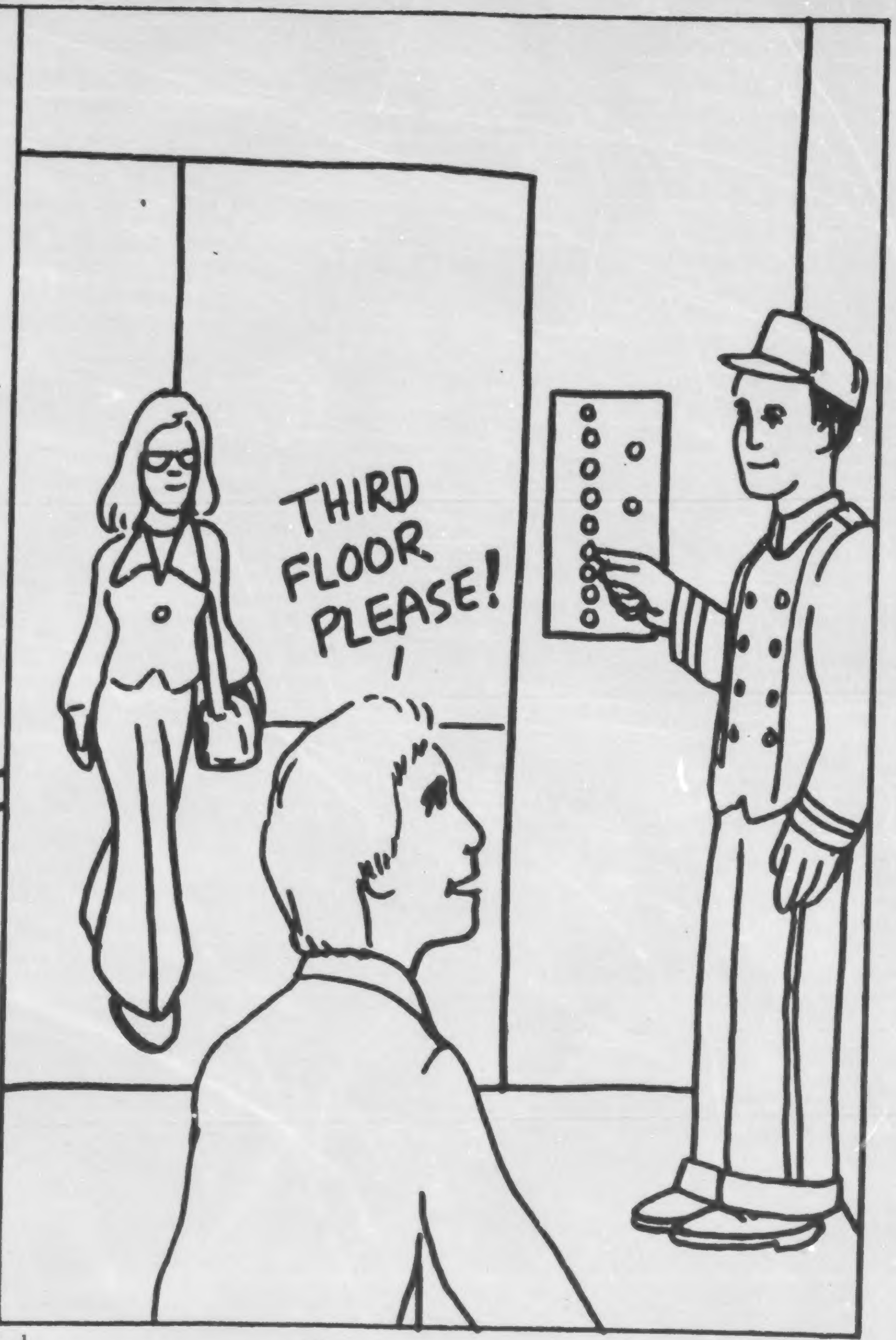
T instructs Ss how to ride freight elevators, stressing that, for safety reasons, touching freight carried in elevator should be avoided.

PERFORMANCE OBJECTIVE: After completing this topic, S, without supervision, will be able to (1) board elevator safely, (2) press button correctly or inform operator of desired floor, (3) leave elevator and (4) ride without touching freight or passengers.

Note: T will evaluate periodically whether S continues to manifest these behaviors.



69


THIRD FLOOR PLEASE!

70

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T points out difference of UP and DOWN escalators to Ss. With escalator in stationary position, T asks T's assistant to demonstrate how to step on escalator, onto rail, slide foot onto step and remain on one step until it is time to get off.

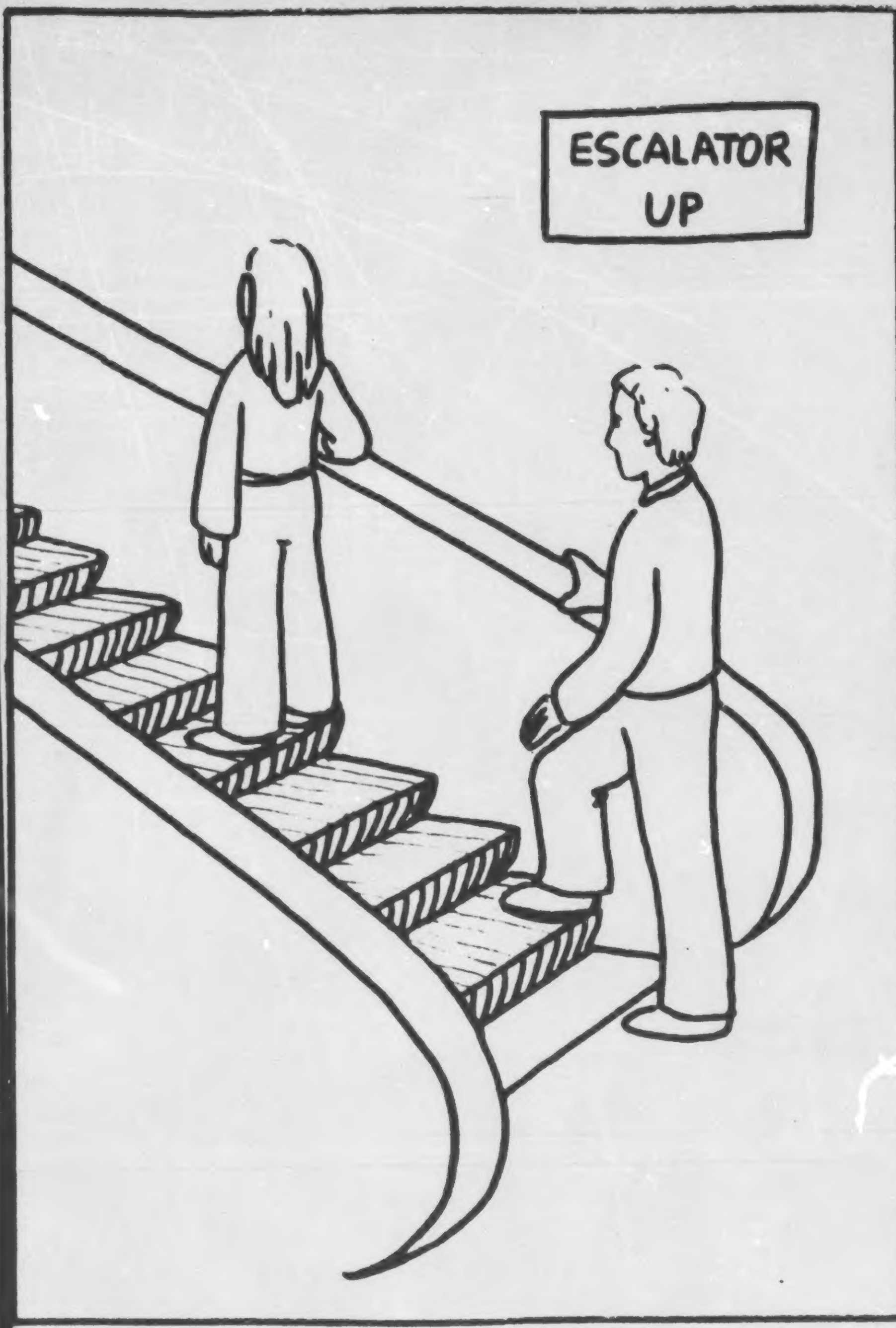
With Ss taking turns, T accompanies each S, in turn, onto escalator, stands in front of S, steps off escalator ahead of S, turns around and watches carefully as S steps off escalator. T escorts each S on DOWN escalator and returns to starting position. T's assistant remains with other Ss.

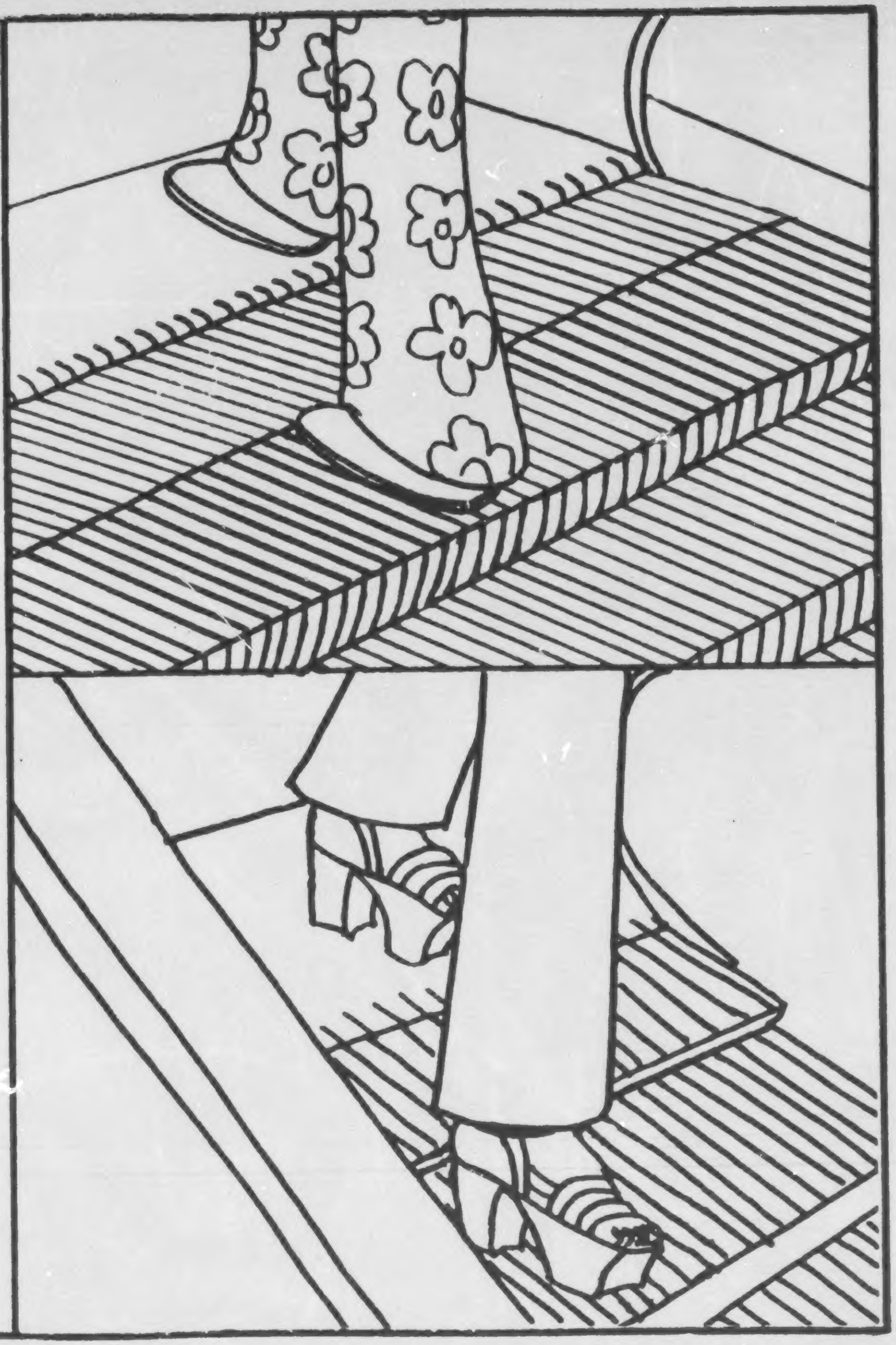
T goes to top of UP escalator, while T's assistant remains at bottom. S volunteers take turns, riding escalator alone to top. When all Ss have made trip, T moves with Ss to top of escalator and each S makes return trip alone.

T discusses such safety aspects as standing still and avoiding horseplay when riding on escalators.

PERFORMANCE OBJECTIVES: After completing this topic, S will be able to (1) board, (2) ride, and (3) leave an escalator safely and unsupervised.

Note: T will evaluate periodically whether S continues to manifest these behaviors.


ESCALATOR
UP



TOPIC: Sitting or Standing for Long Periods of Time

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T exhibits pictures of workers sitting or standing while performing their tasks: assembly line workers, sewing machine operators, cashiers. T directs discussion of difficulty of standing or sitting for extended periods of time. T further compares advantage of wearing comfortable clothing vs. restrictive clothing.

T asks Ss for suggestions on how to alleviate strain while working. T directs conversation to point out that worker cannot leave his place at will, but must remain at the assigned task.

S sits in chair at table placed in front of classroom, so that other Ss can obtain a side view. T instructs S to slouch, then to straighten spine and sit erect, with base of back supported by back of chair. T instructs S to relax shoulders and keep forearms on table. T explains to class during demonstration how slouching affects the spine. T instructs S to relax while sitting, to breathe through nose, exhale through mouth.

Each S in turn performs sitting exercise above.

T repeats demonstration with S standing in front of classroom. T requests S to slouch while putting weight on one foot. T then asks S to stand straight, weight balanced evenly on both feet, shoulders and head relaxed.

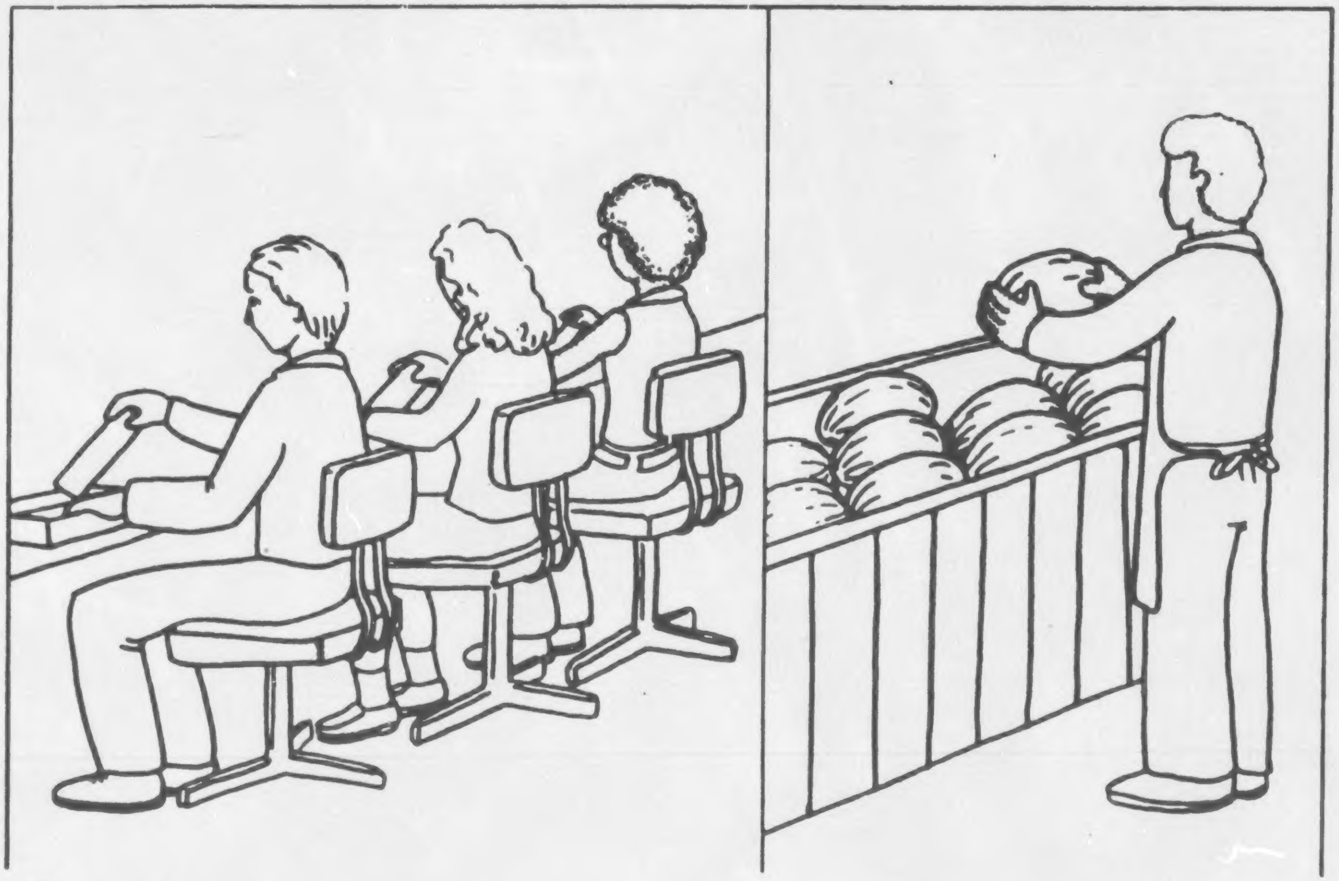
Each S in turn performs standing exercise above.

T asks Ss when it would be permissible to leave assigned tasks, eliciting from Ss the response that breaks, and periods when bathroom facilities have to be used, are an acceptable time. T initiates and directs discussion so that Ss become aware that fidgeting is unacceptable and that it would be wise to walk about for a few minutes during breaks.

TOPIC: Sitting or Standing for Long Periods of Time (cont.) JOB-REQUIRED BEHAVIORS

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to (1) sit and (2) stand correctly (3) without fidgeting and (4) remain at assigned task until given permission to leave. S also relaxes (5) by doing breathing exercises.

Note: T will evaluate periodically whether S continues to manifest these behaviors.



TOPIC: Stooping or Kneeling for Long Periods of Time

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T initiates discussion to elicit from Ss knowledge of correct standing, sitting or kneeling posture.

T demonstrates correct way to pick object from floor by squatting, picking up item and standing straight.

T asks Ss to repeat demonstration.

T stresses that weight should be distributed evenly on balls of feet. T handles prepared materials, stressing straight back position. T rises to a standing position, flexes each leg slightly and raises both arms in an upward stretch position to pull out muscles in shoulders and vertebrae.

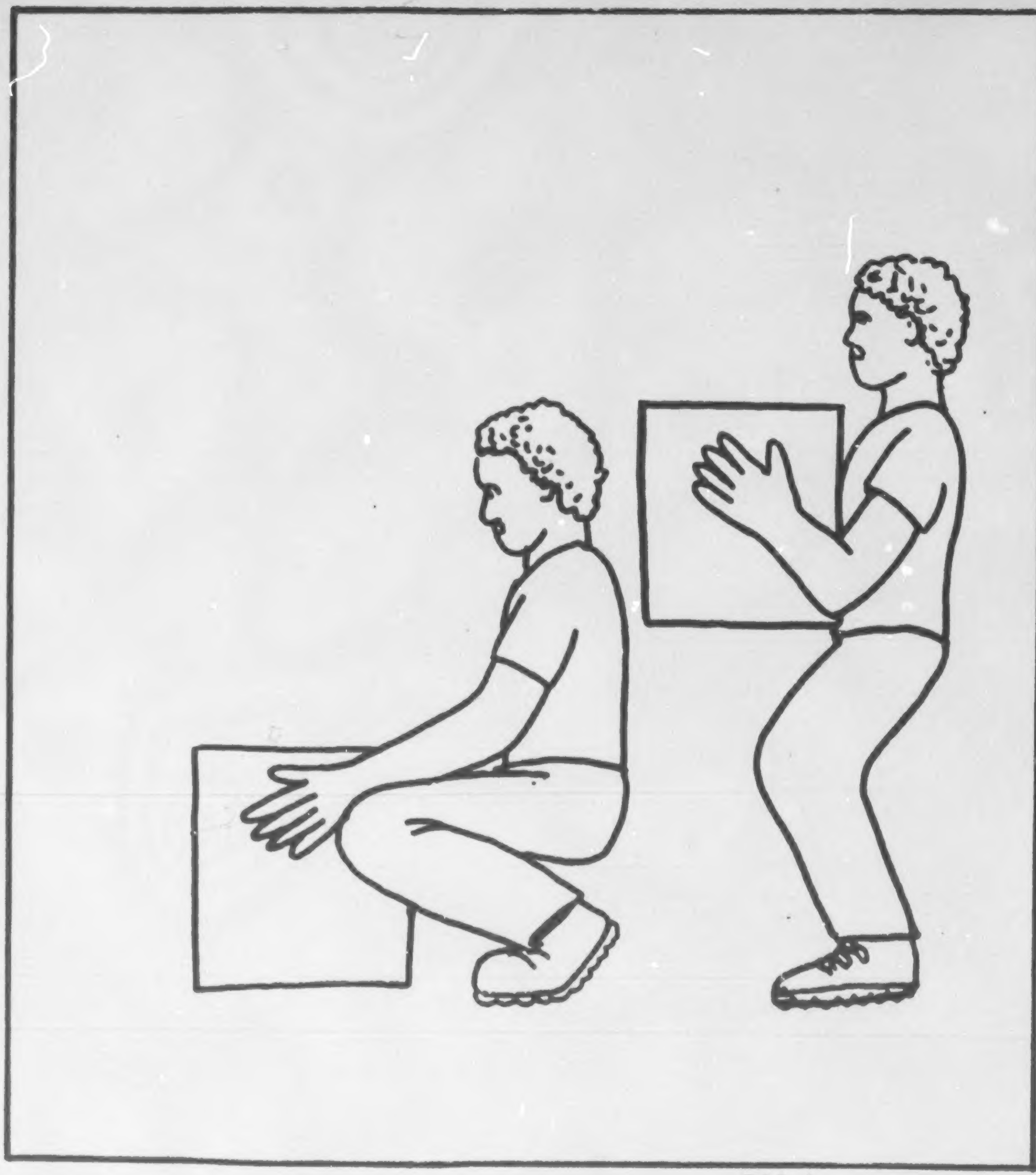
T asks to repeat demonstration.

T drops to kneeling position and works with prepared materials for a length of time while talking to Ss. T leans back on heels to change position. T rises to standing position, using same relaxation exercise outlined above.

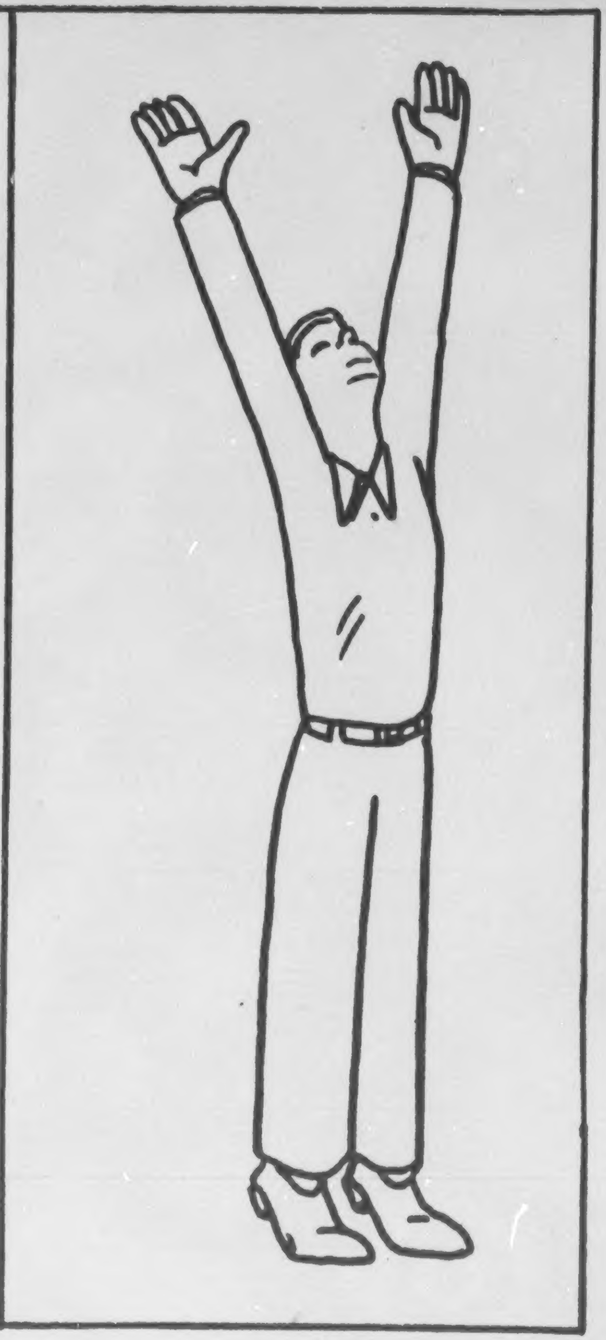
T asks Ss to repeat demonstration.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to perform acceptably a job which requires (1) stooping or (2) kneeling for extended periods.

Note: T will evaluate periodically whether S continues to manifest these behaviors.



81



82

TOPIC: Working Above One's Head

SUGGESTED INSTRUCTIONAL ACTIVITIES:

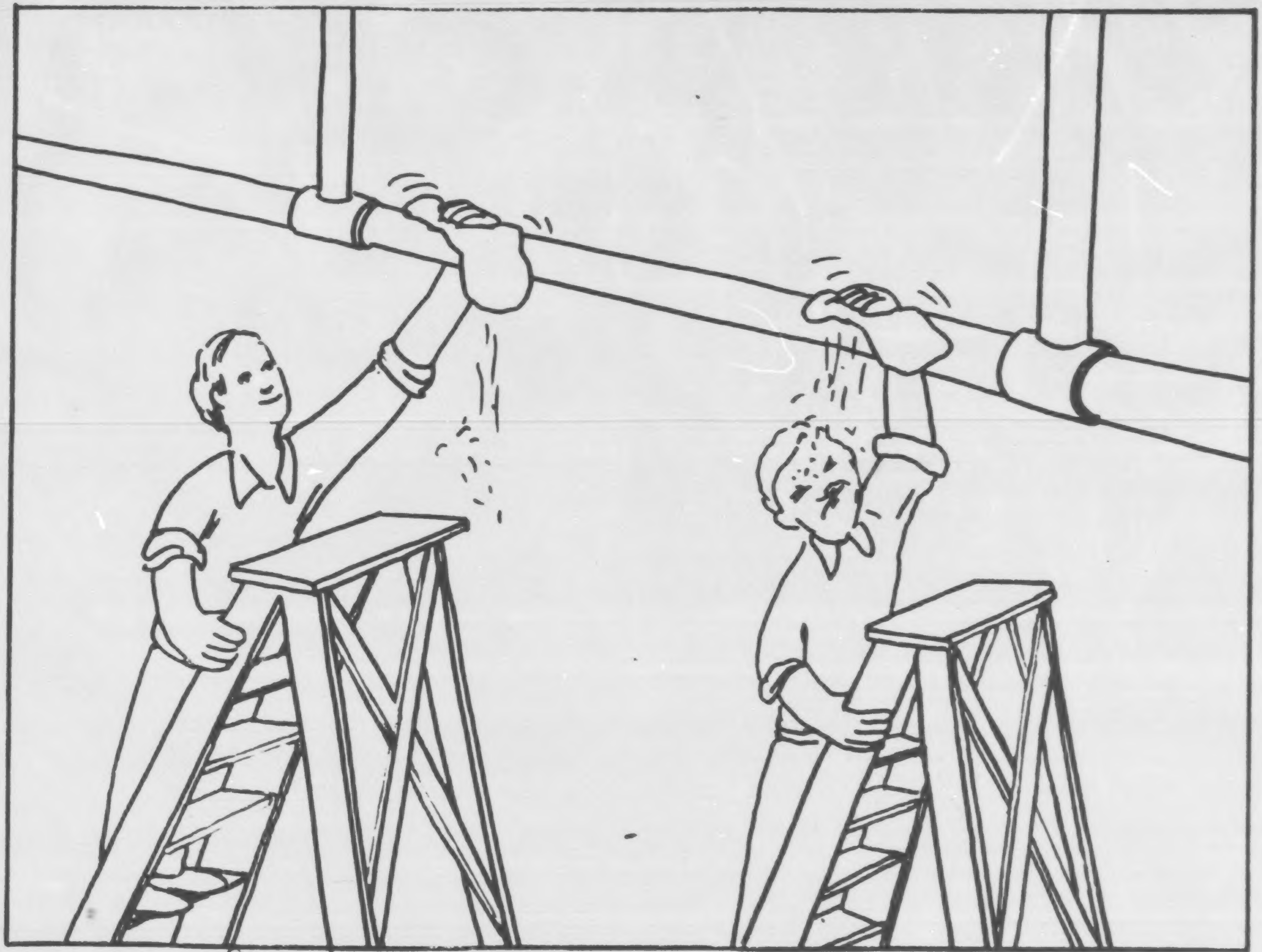
T discusses the many jobs in a place of employment which require working above one's head. T explains that usually a stepladder is used, which has to be balanced carefully to prevent person from falling. Jobs such as handling and cleaning lighting fixtures require special care so that fixture does not fall or break. Overhead dusting requires a ladder, which should be placed in a position so that the dust does not fall on person's face or head.

T sets up stepladder a few feet from overhead work area and proceeds to dust ceilings and overhead grates with a long-handled duster and vacuum with hose extension. Standing on stepladder, T carefully removes, then cleans and reinstalls, a fluorescent tube and two incandescent light globes. T stresses that face should be protected at all times.

S completes several tasks, using care in working above his head as instructed.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to perform acceptably at a job which requires working above one's head.

Note: T will evaluate periodically whether S continues to manifest these behaviors.



85

B19-1

86

TOPIC: Working Alone

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T focuses with Ss upon the meaning of the words "independent" and "responsible" so that these words become the central point of lesson.

After discussion, Ss are asked how they think they would act independently on a job. T also asks Ss' definition of the word "responsible."

T assigns each S a given task in the classroom. Each S performs his job independently, unsupervised and unguided by T, but T quietly observes activities.

After lab session, T reviews completed work with Ss. Ss who did not complete assigned task are asked for reasons: daydreaming, hindering others, talking and leaving the work station are stressed as activities which interfere with work.

T then asks Ss what would happen if a job for an employer were not finished. T reviews meaning of the words "independent" and "responsible."

T reassigns Ss to tasks, stressing emphatically the need to stay with a job and finish it. At next lab session, T again observes Ss' behavior.

T leads discussion of Ss' work activities and how well Ss thought they were behaving in terms of independence and responsibility. T reinforces and clarifies their perception.

T repeats previous learning sequence of assigning tasks and having Ss discuss their perceptions.

PERFORMANCE OBJECTIVE: After completing this topic S will be able to (1) work independently at a specific task, (2) complete it without supervision, (3) within a specified period of time.

Note: T will evaluate periodically whether S continues to manifest these behaviors.

TOPIC: Working in Crowded Areas

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T shows Ss several pictures of young people working in crowded areas, e.g., stocking goods in a narrow supermarket aisle, cleaning a lunch counter during busy periods, moving a merchandise cart in a department store. T then directs the discussion toward the problem of working in crowded areas. T illustrates, referring to Ss' own experience with crowded situations, the need for caution when moving carts, backing up, turning around, moving suddenly and lifting things.

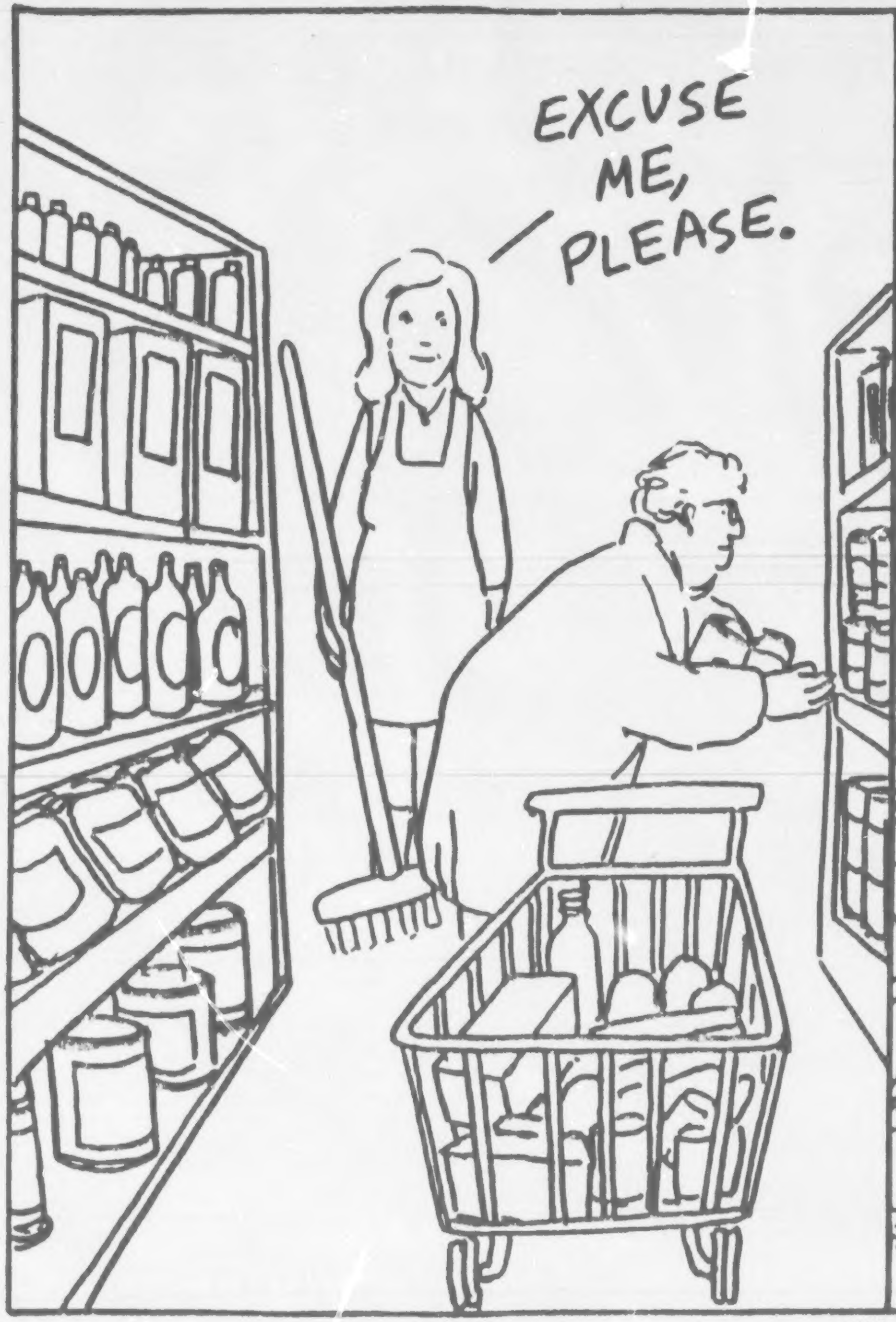
T shows Ss pictures of young people working in crowded areas, including several which show the workers handling tools and equipment in a manner which is hazardous to others. T asks Ss to identify the hazardous situations and to explain how a worker can do the job safely. T stresses the need for caution in handling or using tools when moving or turning around.

T stresses the importance of keeping the working area orderly and cleaning up as required when moving to different locations.

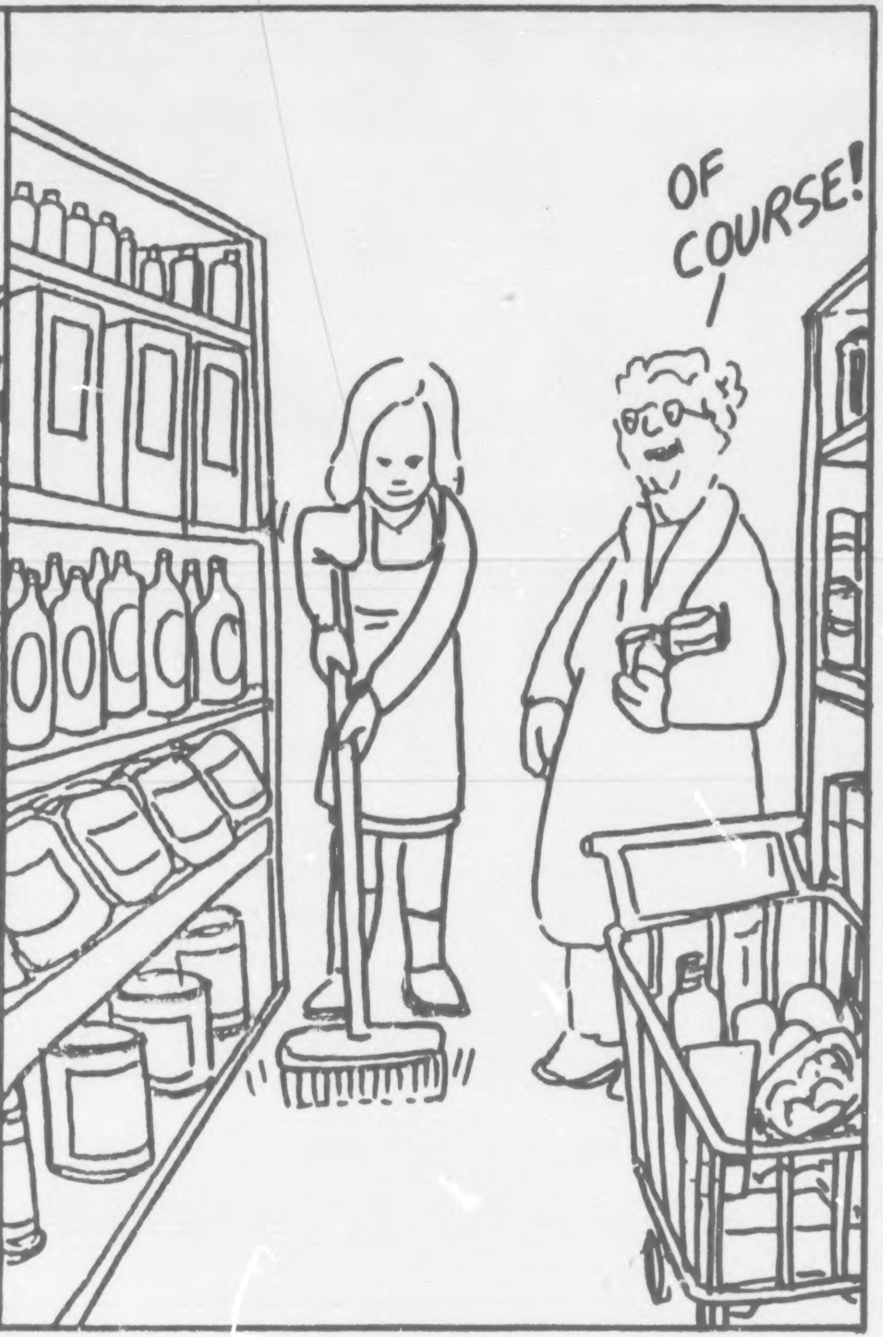
T arranges for each S to work in a crowded area and observe S's performance of the target behaviors. If required, T structures training situations in which S can further practice the desired behaviors.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to work in a crowded area by (1) taking precautions not to endanger other workers or passers-by and (2) maintaining orderliness and neatness of work area.

Note: T will evaluate periodically whether S continues to manifest these behaviors.


EXCUSE ME, PLEASE.

91



92

TOPIC: Working in Loading Areas

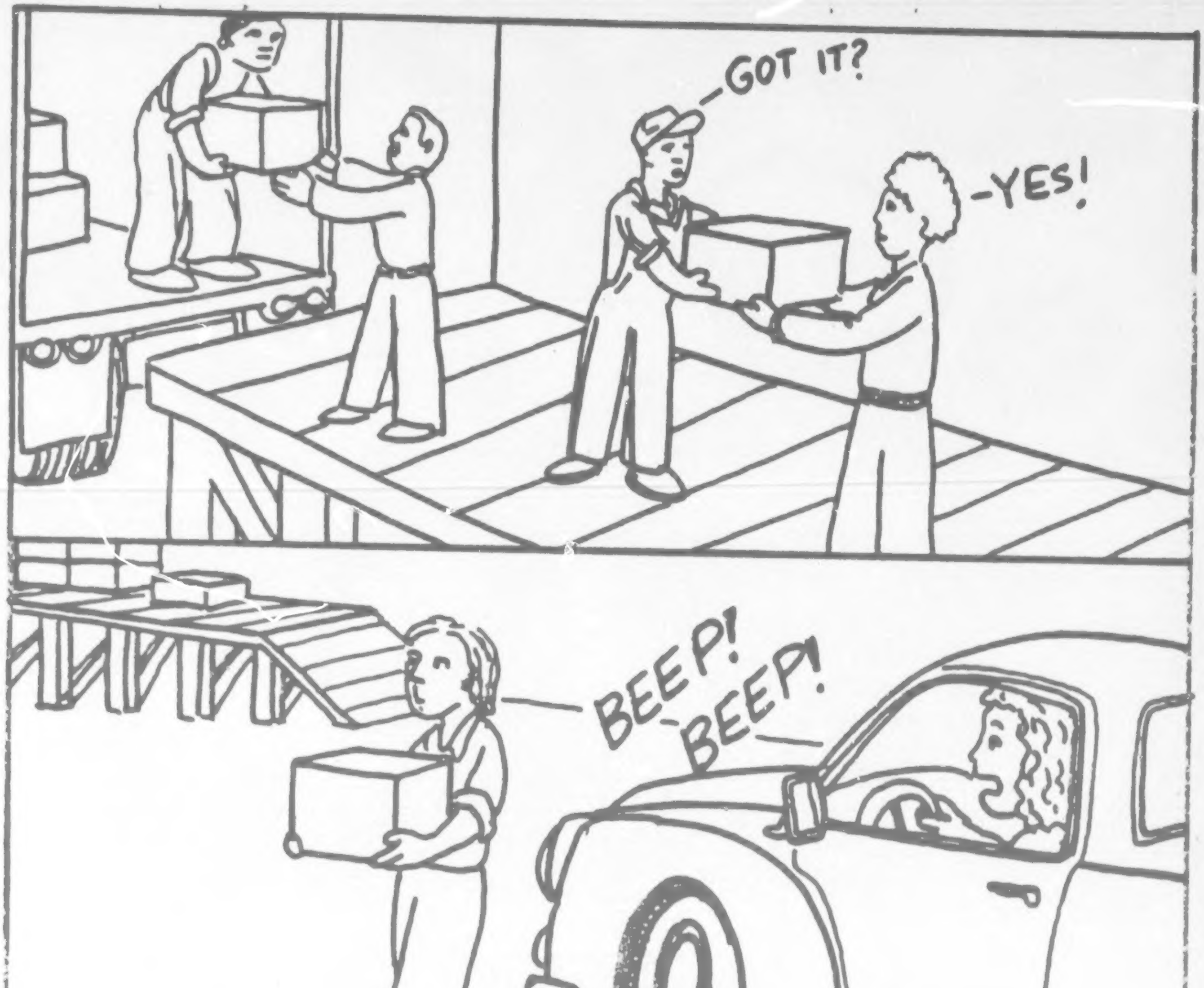
SUGGESTED INSTRUCTIONAL ACTIVITIES:

T exhibits several pictures of young people working in different loading areas such as a department store, outdoor truck-loading platform, airport baggage room, supermarket stockroom conveyor belt and chute. Ss draw upon their own experience in discussing with teacher the hectic activities and hazards of these areas. T emphasizes the need to follow instructions and safety rules, to be aware of the whereabouts and actions of other workers, to be on the alert for moving objects and vehicles, and to avoid daydreaming.

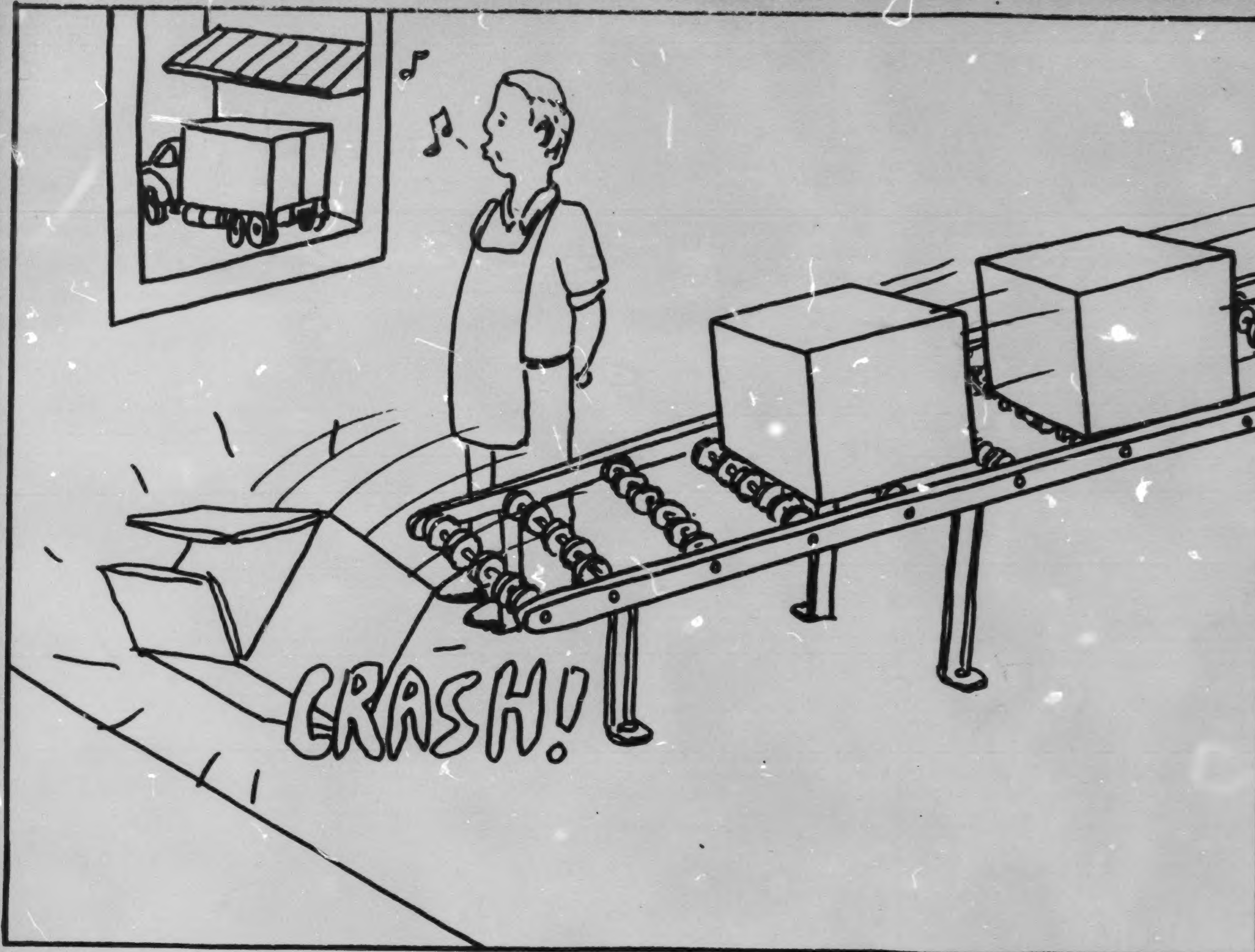
T arranges for S to work in simulated or actual loading areas and observe S's performance of the target behaviors. If required, T structures training situations in which S can practice desired behaviors.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to work in a loading area without endangering himself or others.

Note: T will evaluate periodically whether S continues to manifest these behaviors.


GOT IT?
YES!
BEEP! BEEP!
OW!
OOPS!

122-1



B22-2

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T shows Ss several pictures of young people working in public areas with strangers walking by, e.g., sweeper on railroad platform, wrapper at cashier's desk in department store, stock clerk in supermarket. T then has class define the phrase "working in public." Ss become aware during discussion that workers should avoid being distracted by passersby.

T exhibits similar pictures: one of them shows a sweeper pointing towards the lavatory with the sign "Men," and another depicts a worker stepping aside for a person pushing a cart. T leads a discussion to differentiate between working in public and answering questions, giving directions, getting out of someone's way, and becoming distracted by passersby, talking spontaneously and neglecting the job.

Role Play #1: S plays a customer looking for candy and T plays a stock clerk in supermarket. T is overly friendly and talks about unrelated things, then tells customer where to find candy.

T asks class to react to situation and directs Ss to identify incorrect and suggested correct behavior.

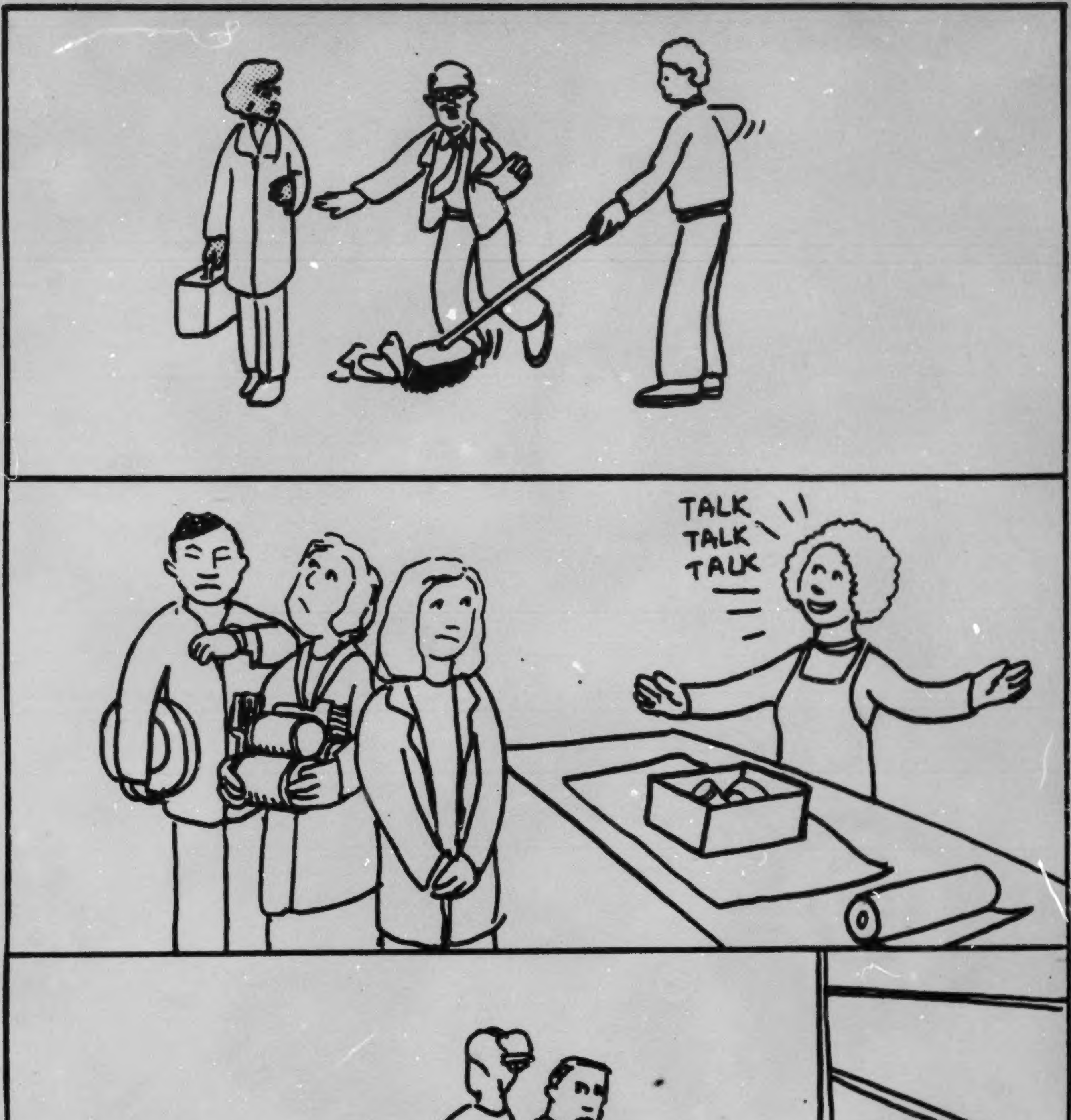
Role Play #2: Role play #1 is replayed with T acting as customer and S acting as stock clerk. Role play is repeated with several Ss.

T asks Ss to compare the difference between social and working relationships. Ss should point out what while on the job they should not become involved with passersby or their activities except to answer pertinent questions.

T arranges for each S to work alone in contact with the public to observe his performance.

If required, T structures a role play, similar to role play #2, with the Ss who need further practice acting the role of the worker.

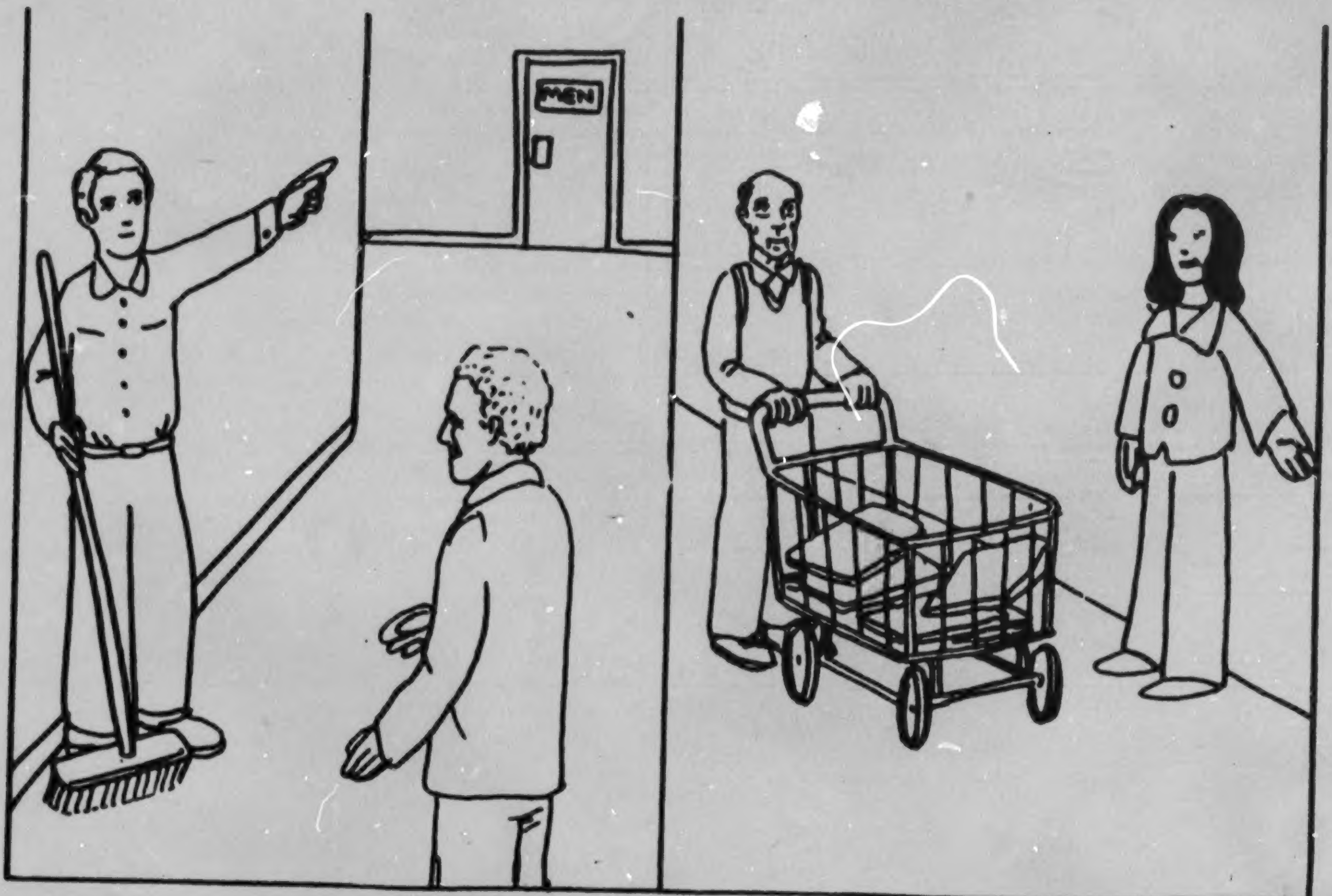
B23-1


TALK
TALK
TALK

TOPIC: Working in Public Areas (cont.) **JOB-REQUIRED BEHAVIORS**

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to (1) work continuously in public area without becoming involved with passersby or their activities, (2) answer questions when asked and return to work, and (3) step aside when necessary to avoid blocking traffic.

Note: T will evaluate periodically whether S continues to manifest these behaviors.



SUGGESTED INSTRUCTIONAL ACTIVITIES:

Before beginning discussion, T organizes three sets of pictures:

- Set #1 shows young workers correctly and safely performing jobs similar to Ss' jobs.
- Set #2 corresponds to set #1 but shows workers suffering consequences of ignoring safety, and
- Set #3 contains unidentical pictures, showing the consequences of workers ignoring safety factors.

T structures the discussion in the following sequence:

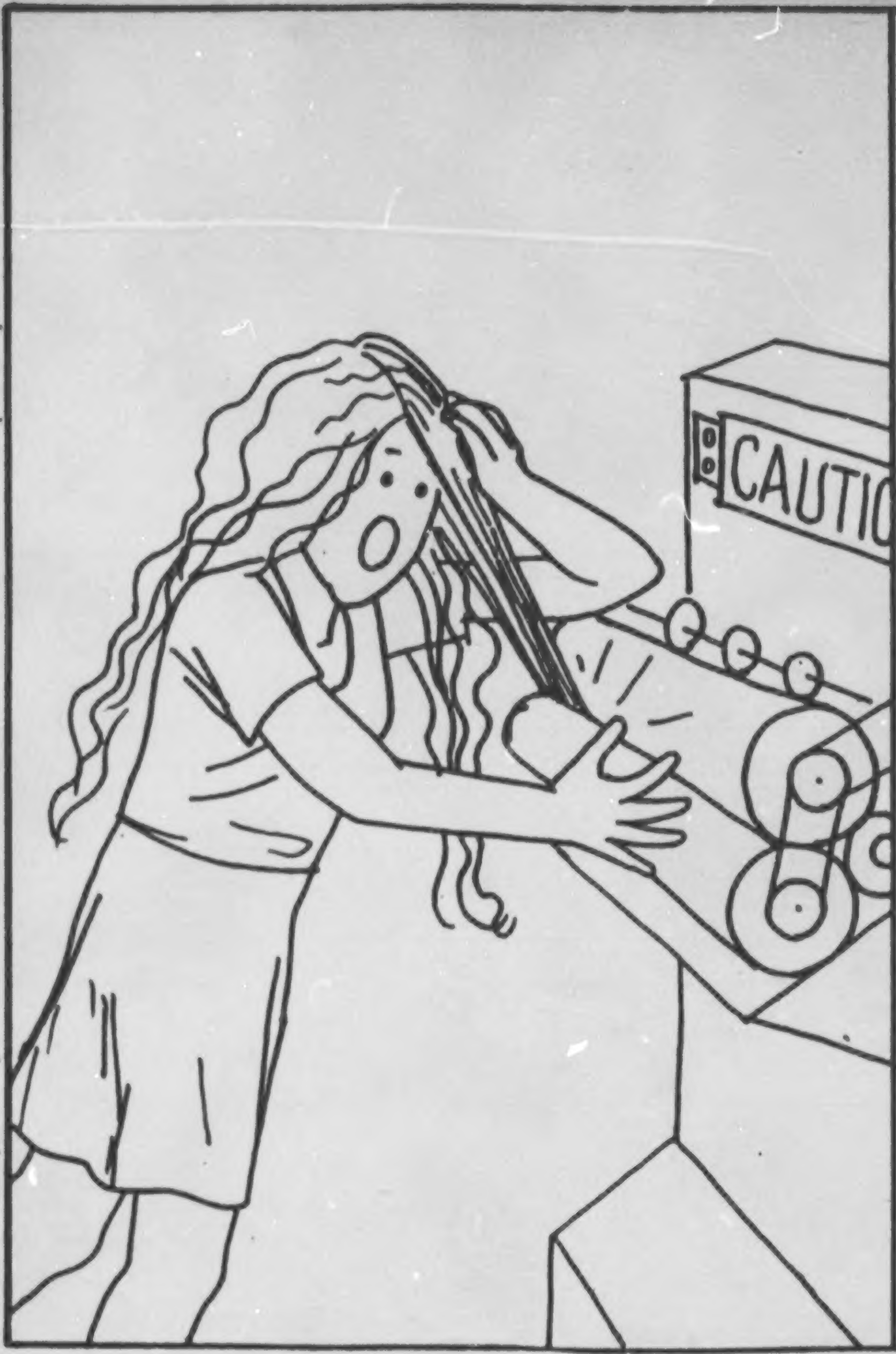
1. T exhibits a picture of the consequences of "not working safely" from set #2. T elicits comments from Ss and suggestions for working safely.

2. T shows the corresponding "working safely" picture from set #1 and guides the Ss to agreement that this is the better way to work.

3. T repeats step #1 and #2 above for at least two more pairs of pictures.

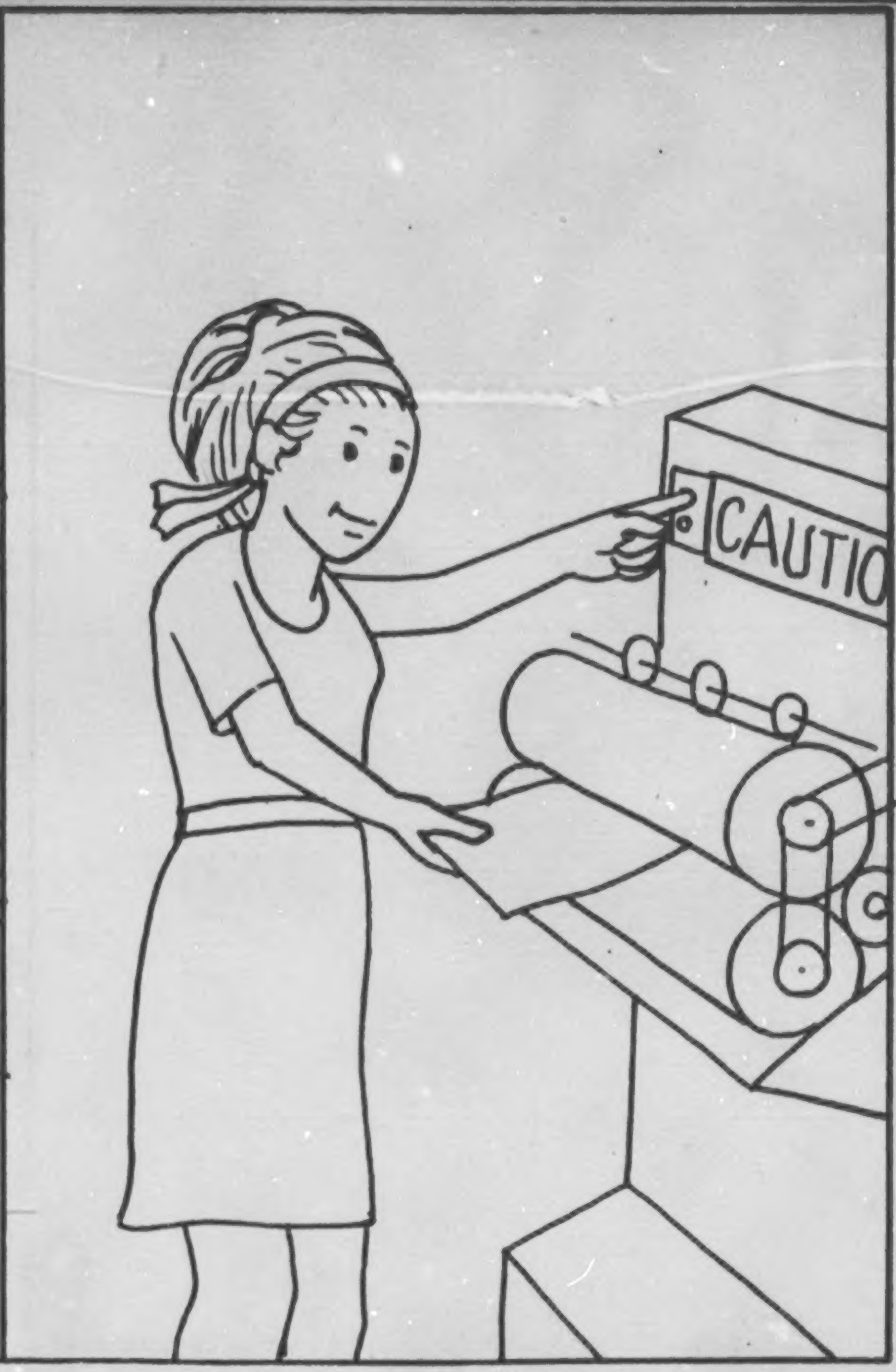
4. T shows a "working safely" picture from set #1 and a "working unsafely" picture from set #3, the two of which do not correspond. If a S makes a comment concerning the noncorrespondence of the pictures, T should use this as a lead to discuss that working safely is required on all jobs. If none of the Ss notes the noncorrespondence of the pictures, T should elicit such a comment from the group, then continue developing a discussion concerning the need to consider safety at all times. This discussion should emphasize that daydreaming, playing pranks, poking around, staring into space, rocking back and forth and such behaviors should be avoided.

T develops a game in which he mixes up sets #1 and #2. Ss first sort all pictures into "working safely" and "not working safely" groups, and then match the corresponding safe, unsafe work situations. T encourages Ss to determine which element of the picture shows an unsafe working condition.

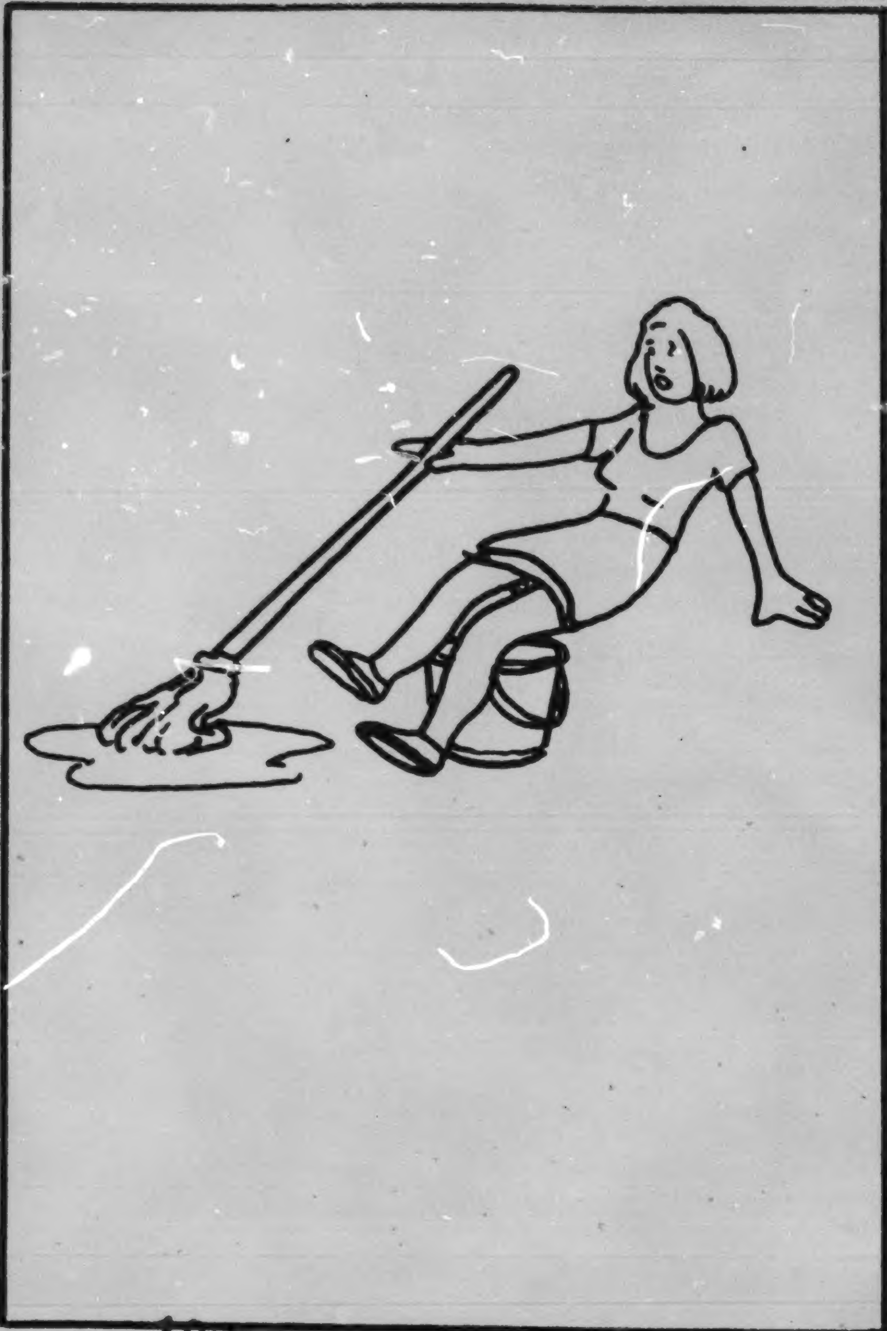


105

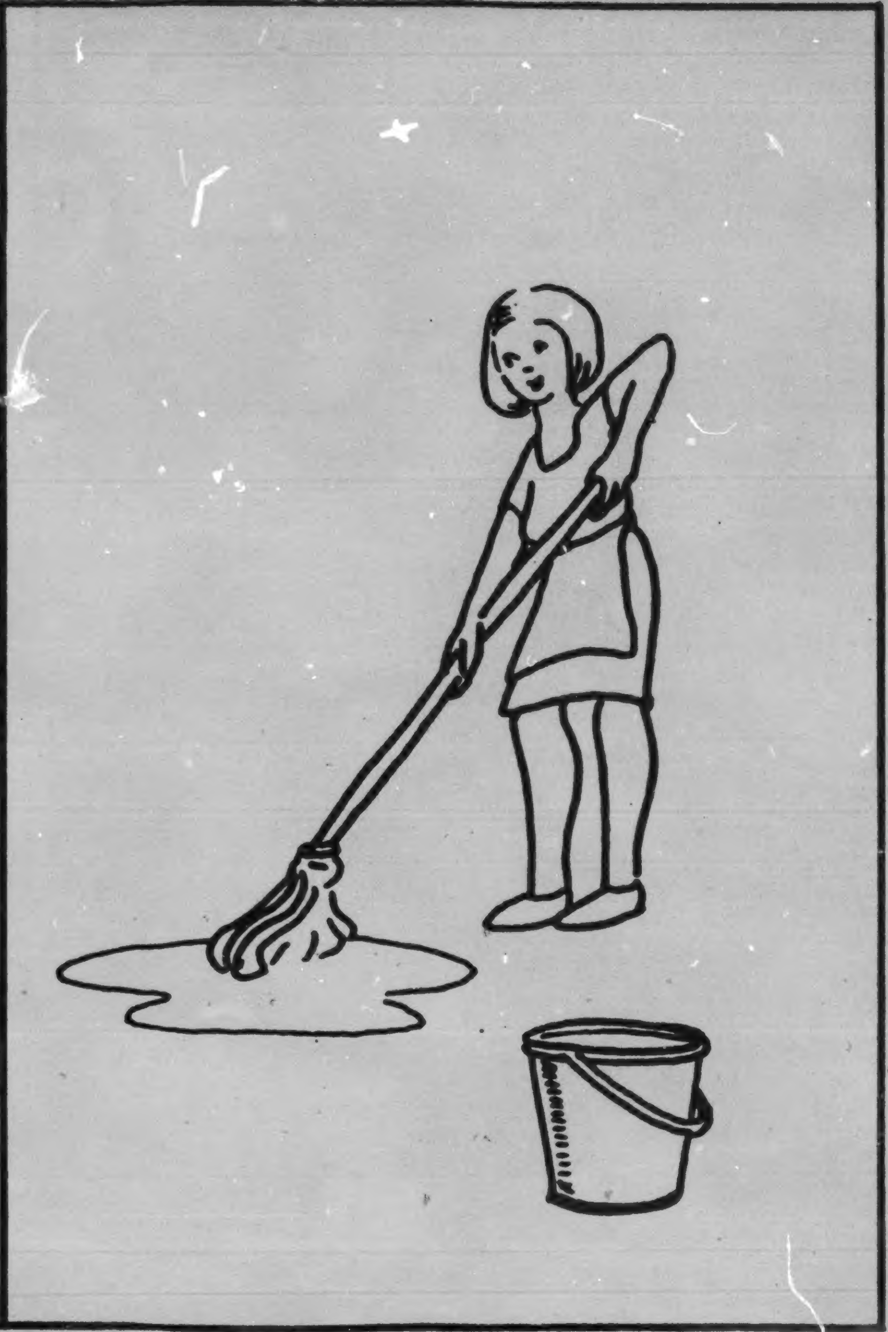
B25-1



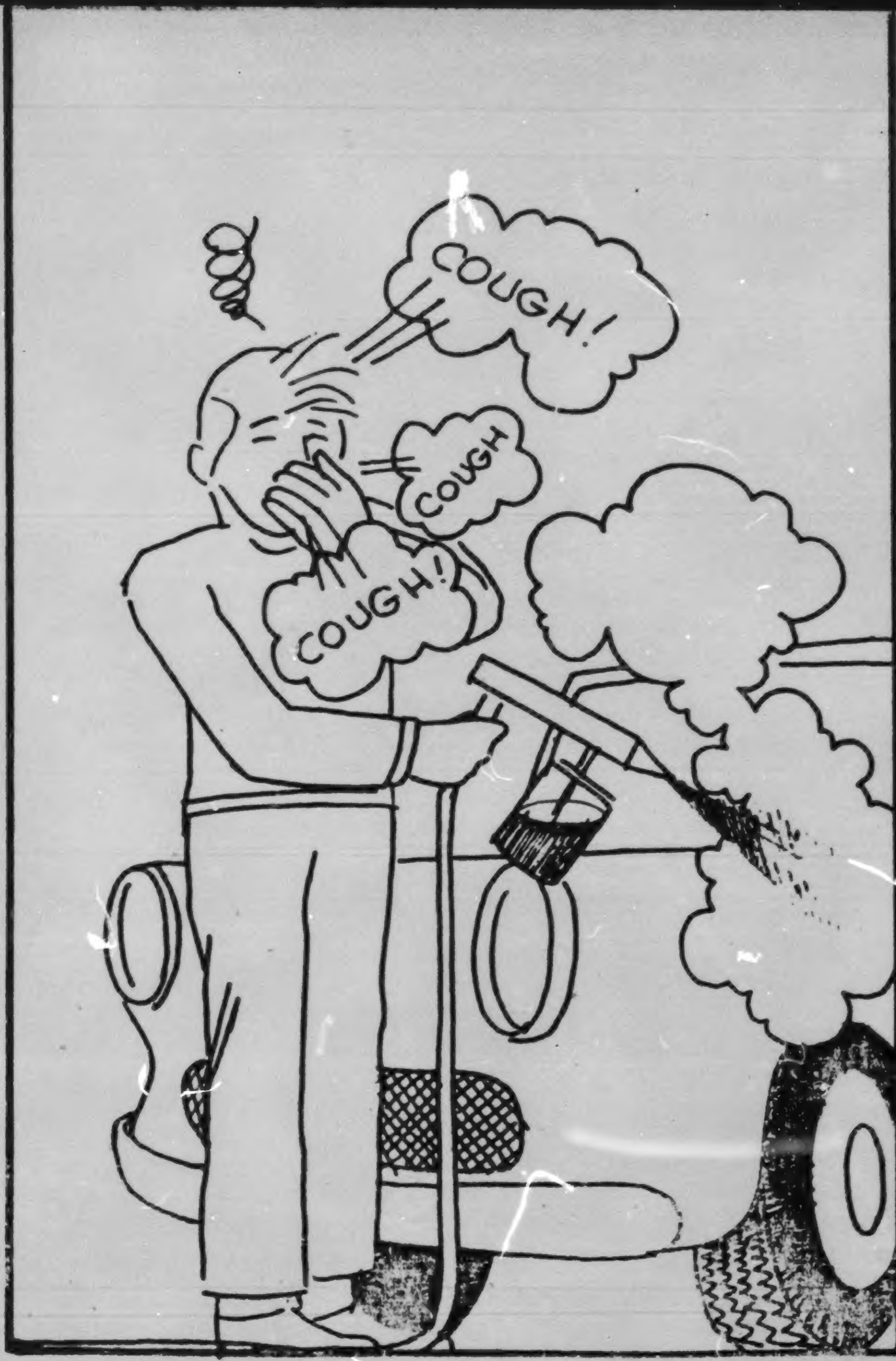
106



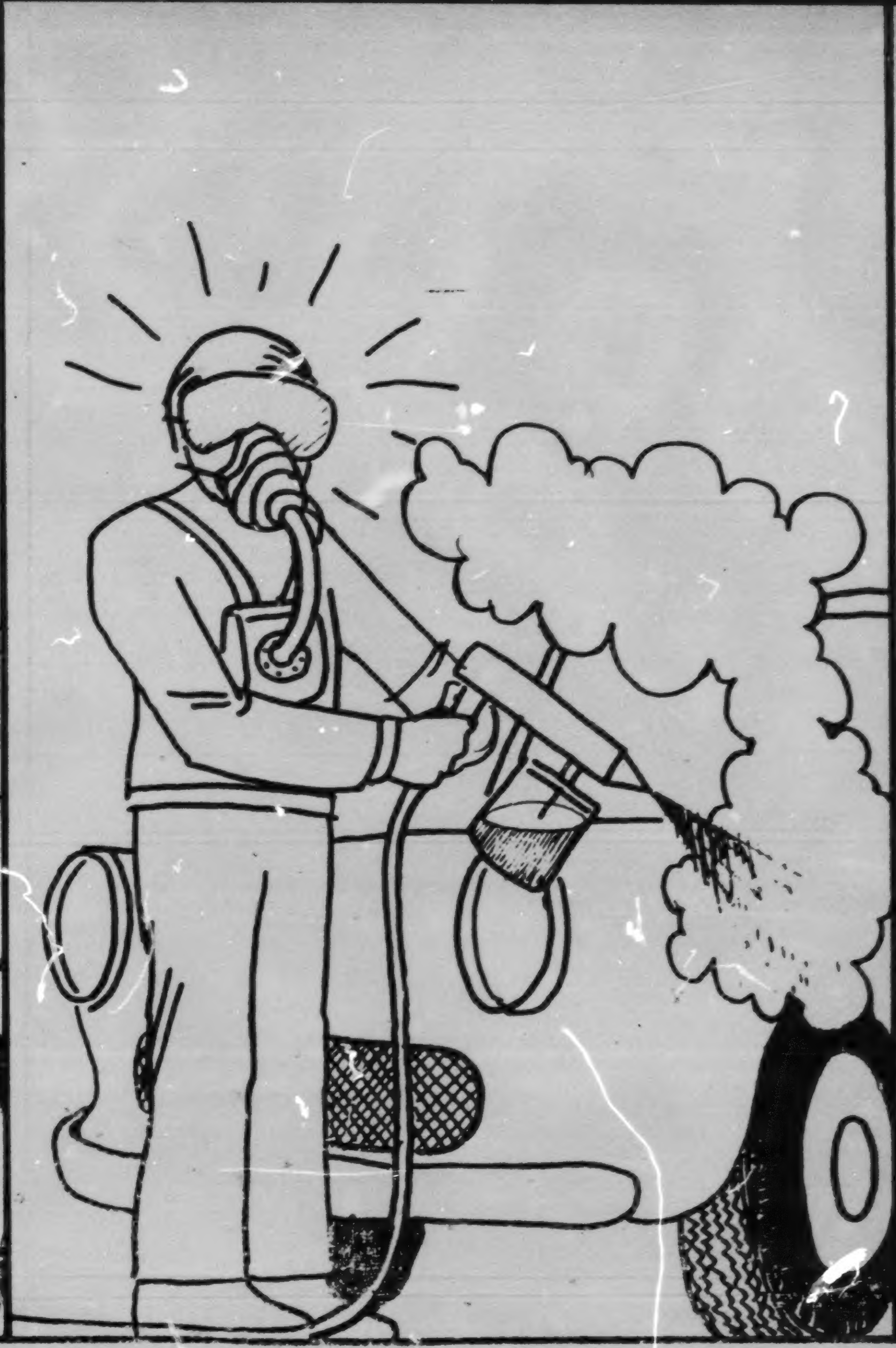
107



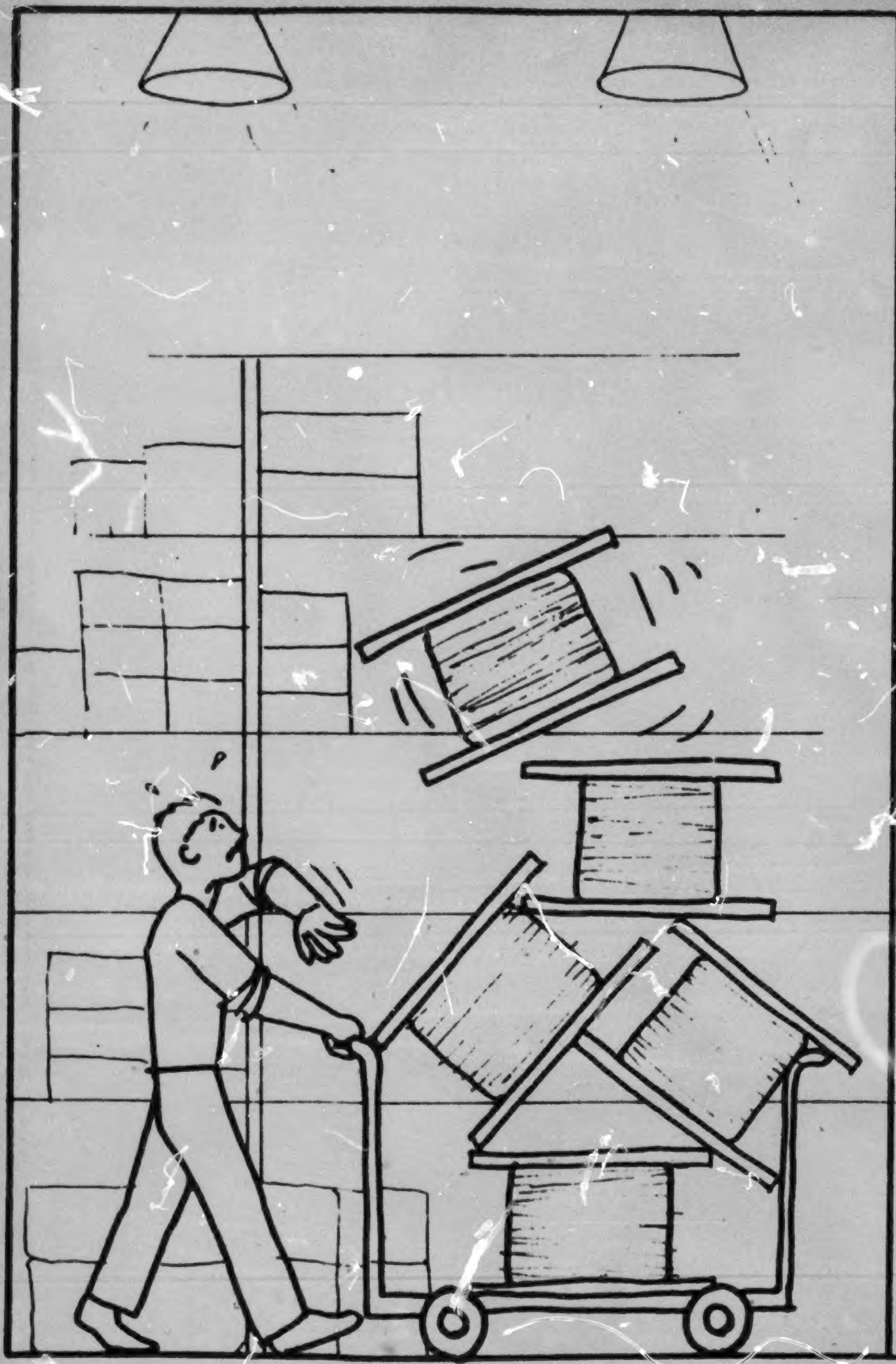
108


COUGH!
COUGH
COUGH!

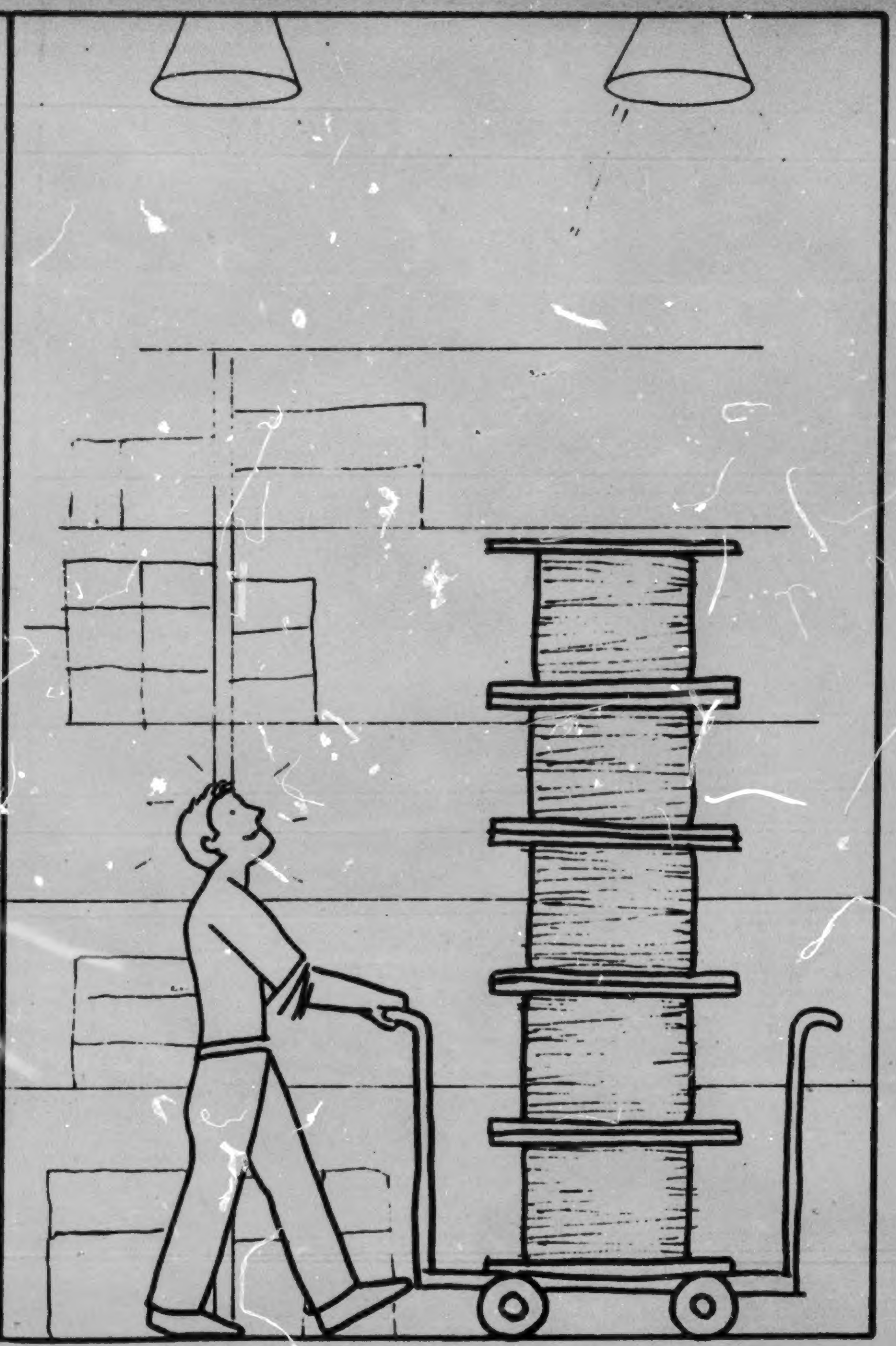
109



110

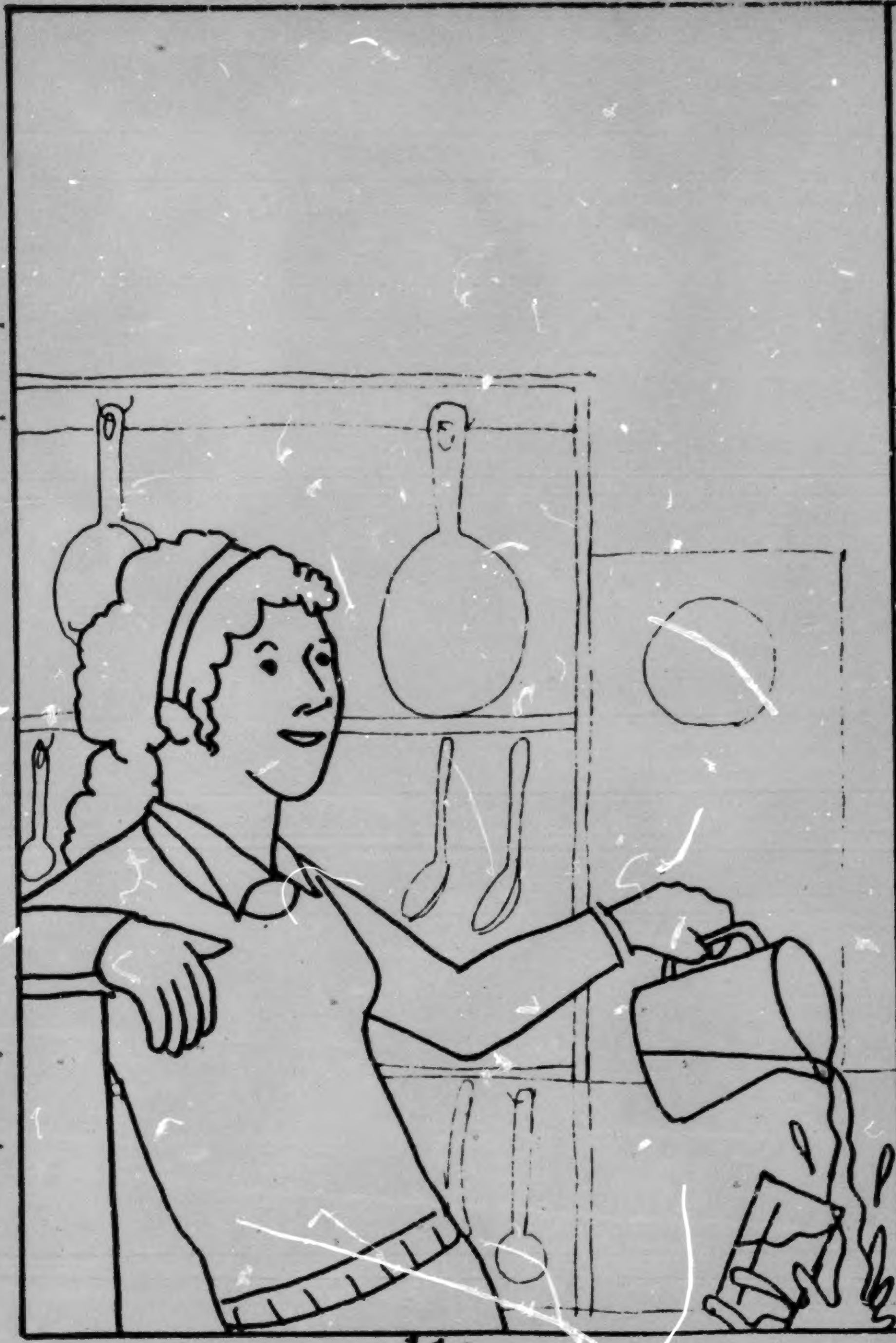


111

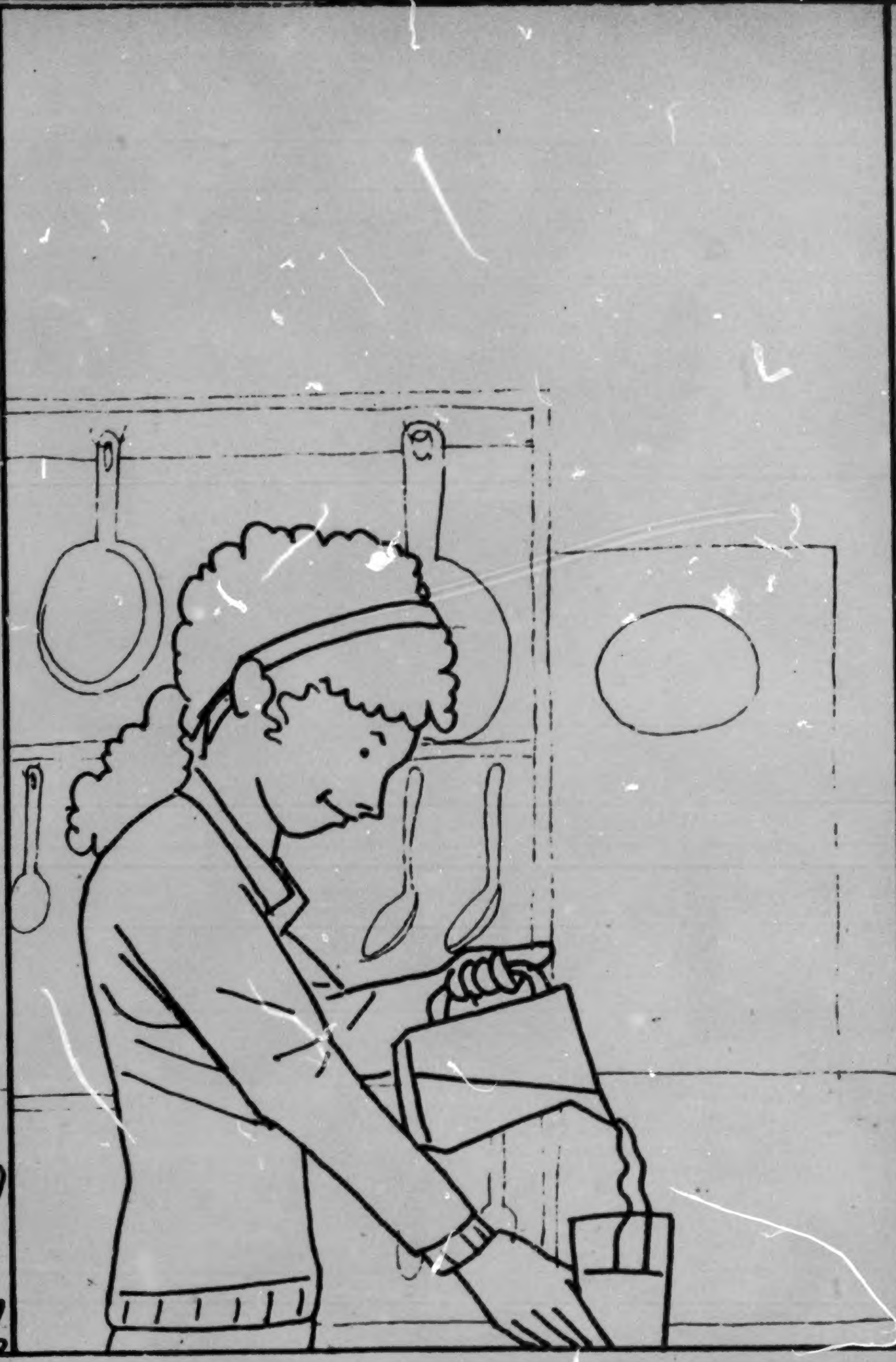


112

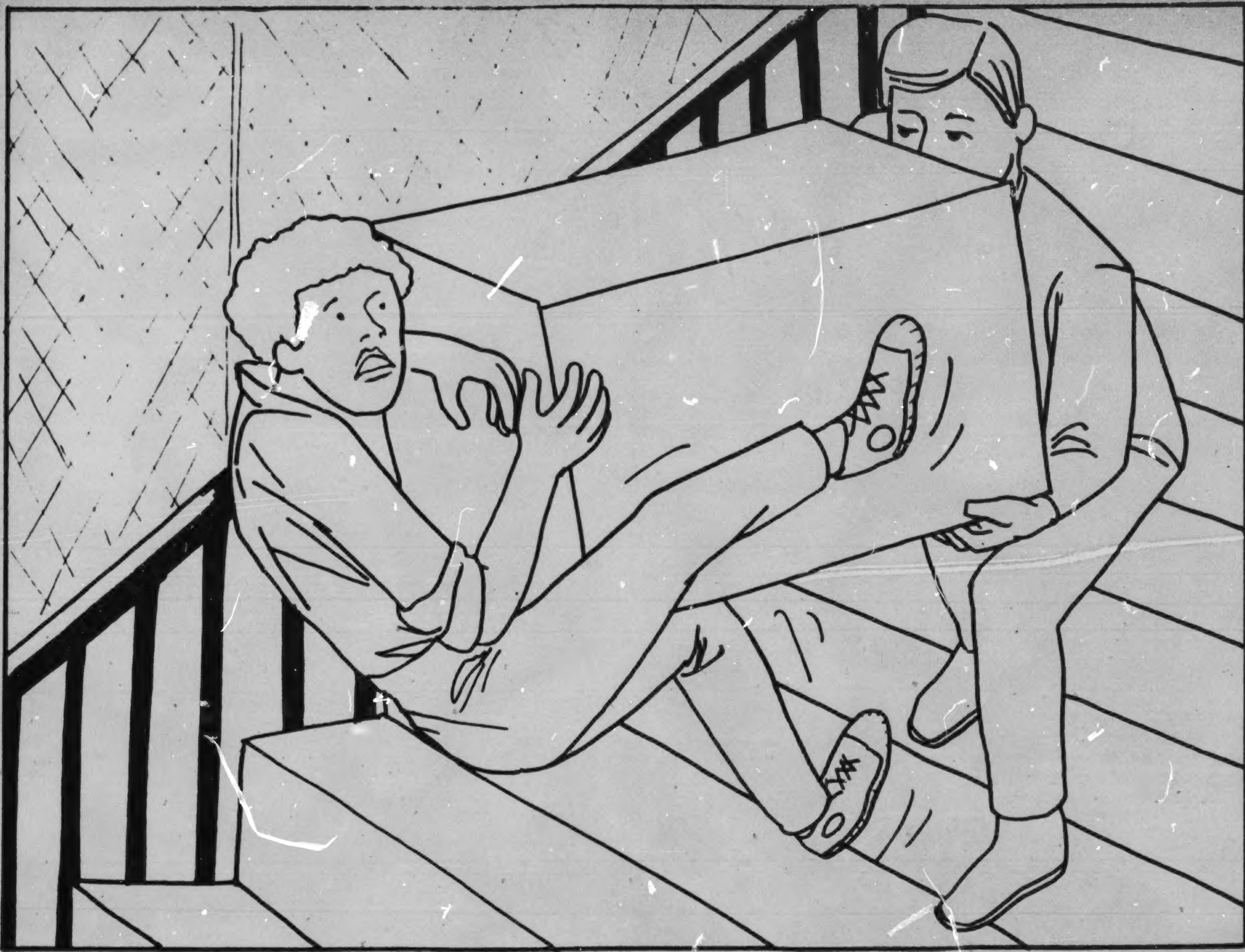
B25-4



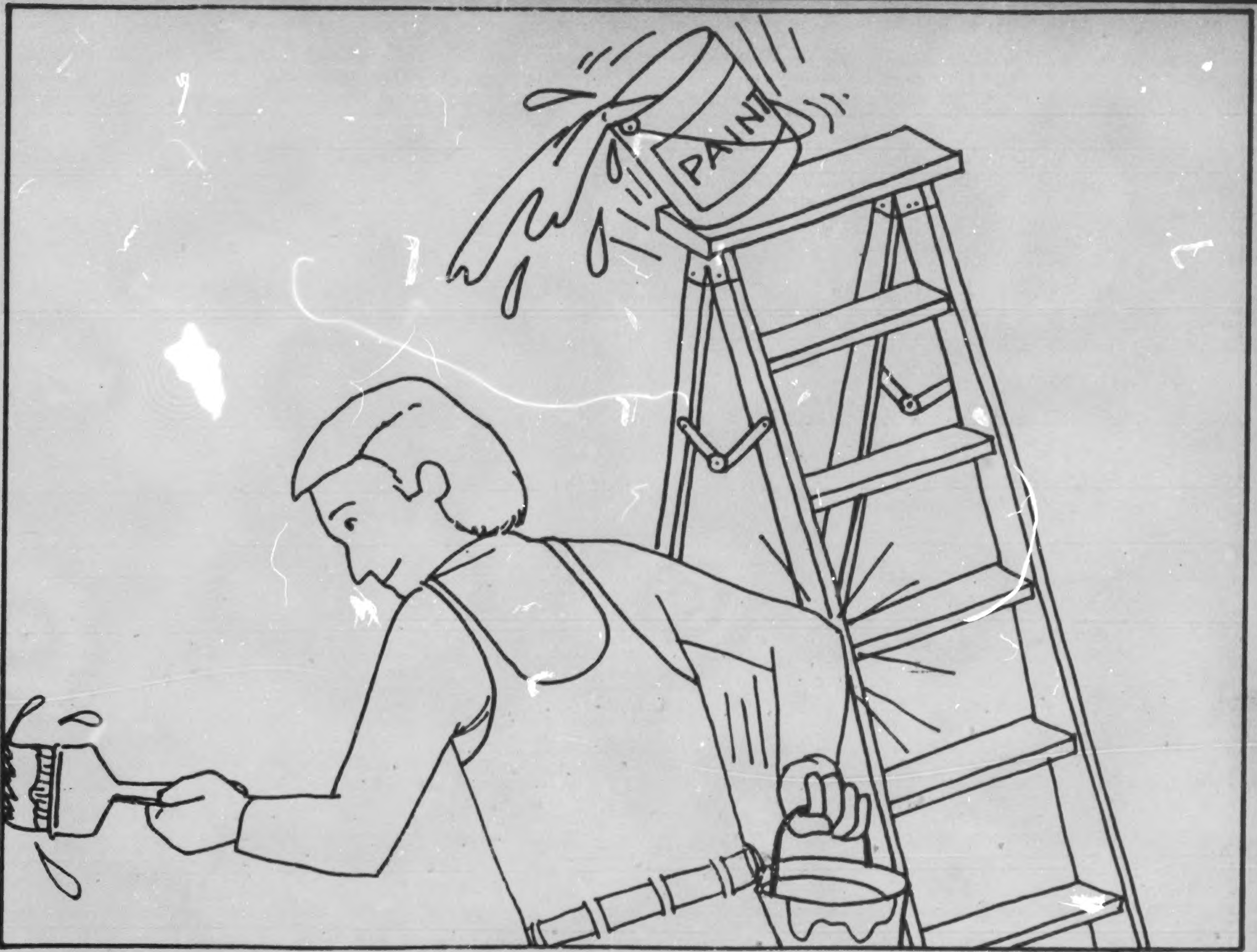
113



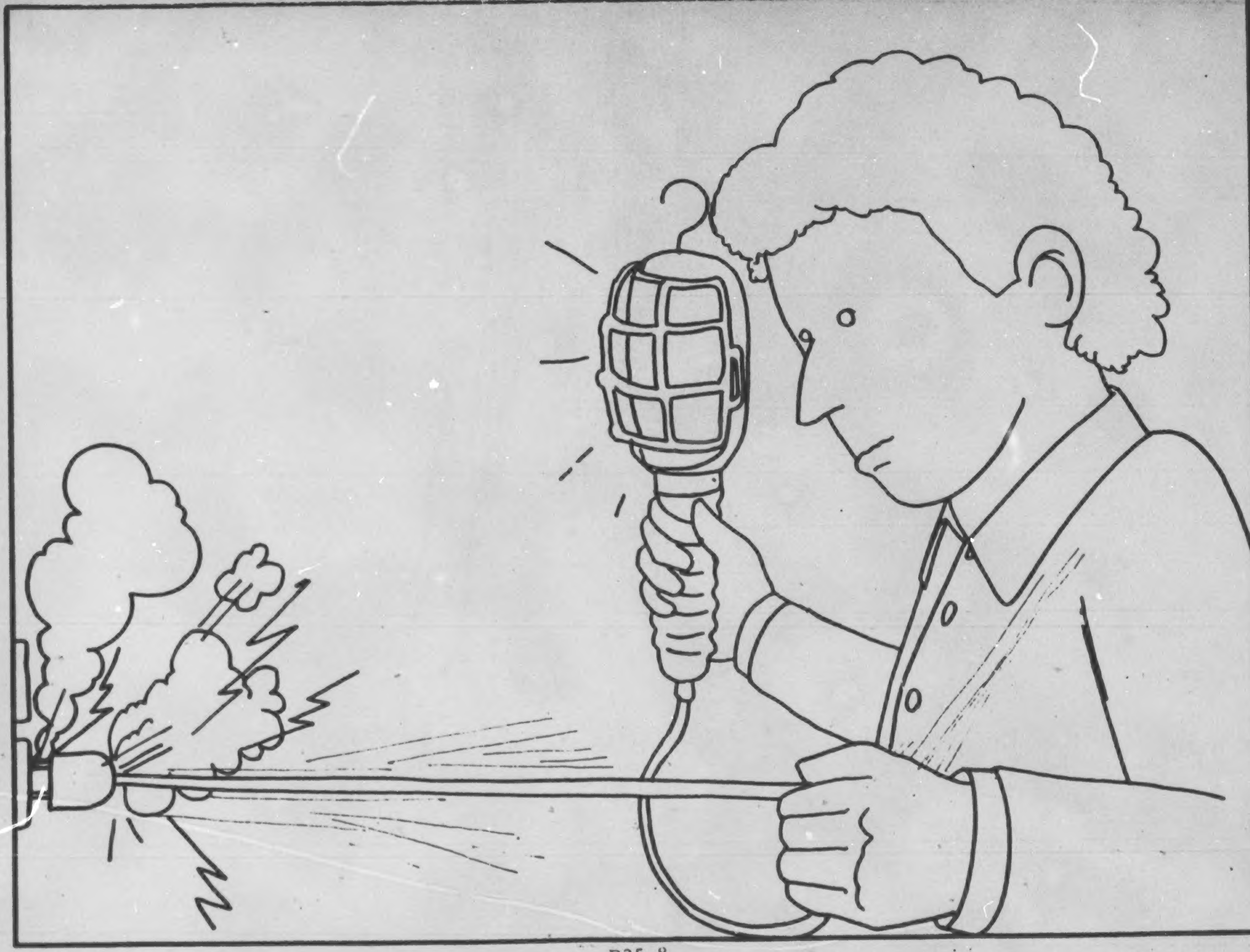
114



B25-6



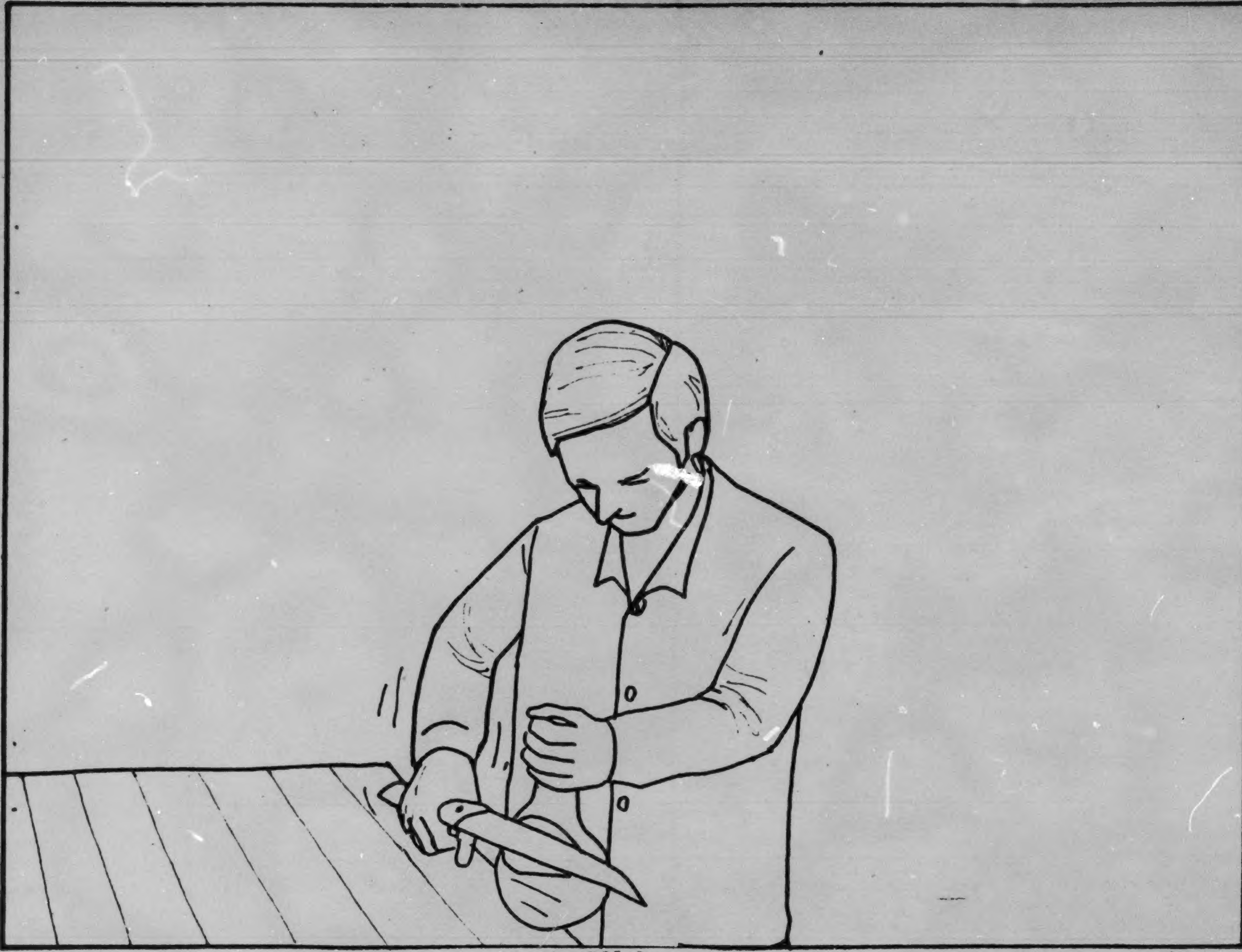
B25-7



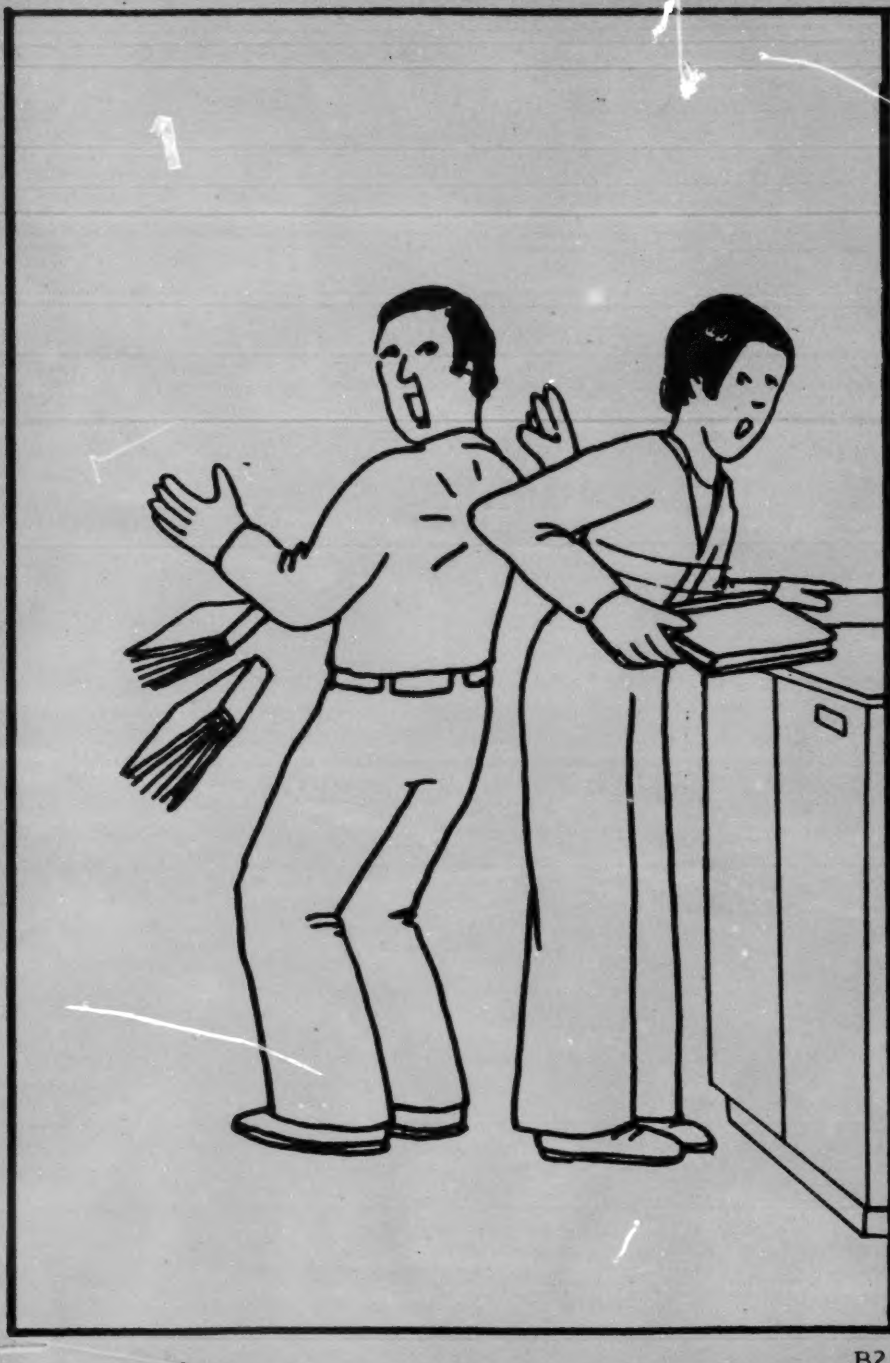
B25-8

119

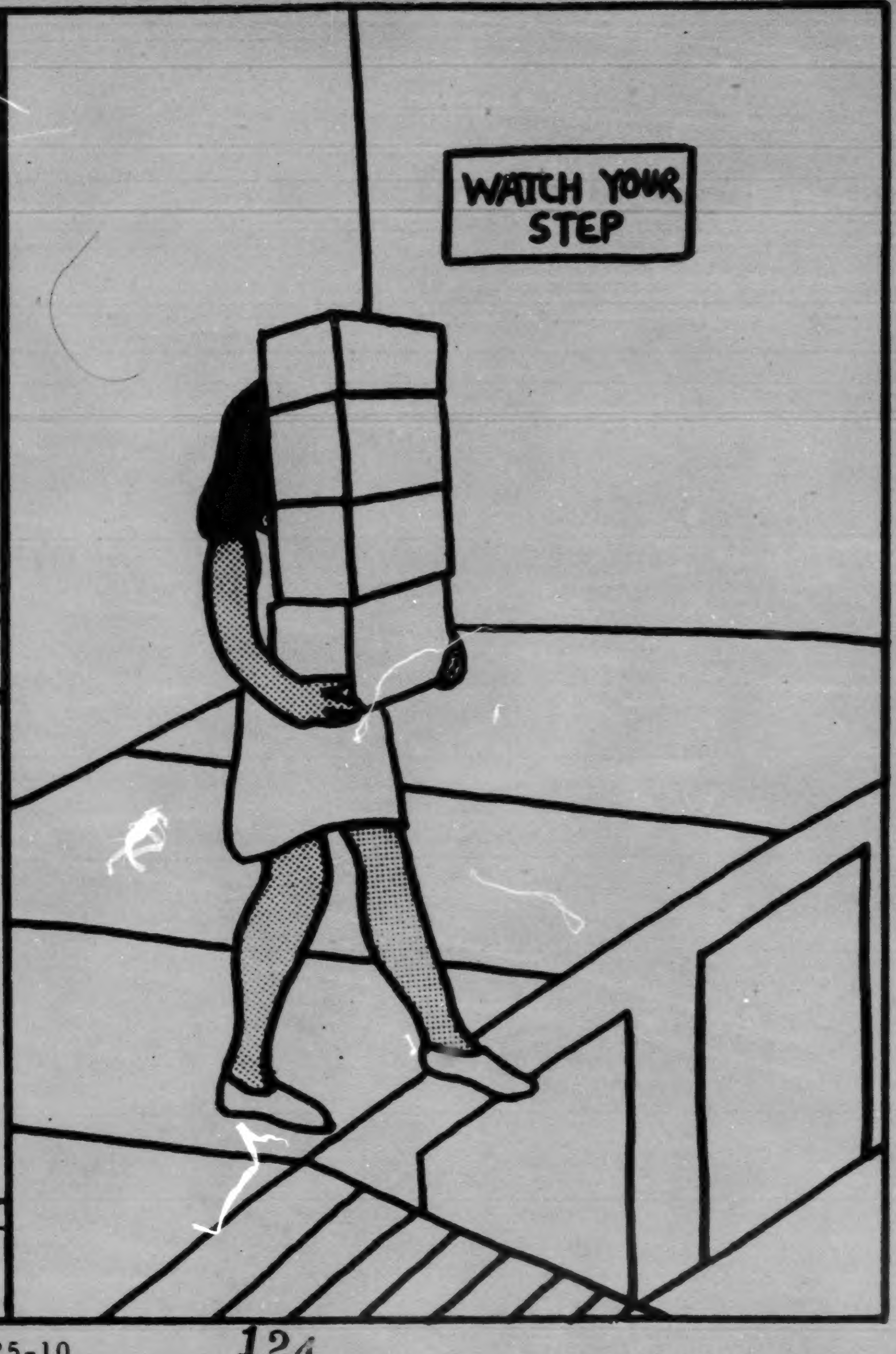
120



B25-9



123


WATCH YOUR STEP

124

T exhibits a picture from set #3 and draws Ss into discussion concerning the unsafe work situation and how to make it safe, yet have the work done properly. T tries to apply "working safely at all times" to other everyday situations with which Ss may be familiar in their homes, at school or at work.

T develops a game in which Ss can sort pictures of all three sets into safe and unsafe sets and verbalize or draw safe working procedures for pictures with unsafe conditions.

T elicits comments from Ss about their perceptions of safe behavior at work, school and home. T should not permit extensive descriptions of unsafe activities by Ss; if this occurs, T should stress that this is unsafe behavior and should not be tried out by the other Ss.

T checks out each S's personal perception of safe working conditions and his general performance, both in group and individual discussion, clarifying and reinforcing safety rules as necessary.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to (1) work safely at assigned tasks and also demonstrate a safety set by (2) sorting pictures into safe and unsafe groups and (3) making suggestions for safe working procedures for the pictures exhibiting unsafe conditions.

Note: T will evaluate periodically whether S continues to manifest these behaviors.

TOPIC: Working Under Pressure

SUGGESTED INSTRUCTIONAL ACTIVITIES:

T discusses with Ss various trades in which people work under pressure: salesclerk, kitchen worker, porter, etc. T explains that, at certain times of the day, activity increases and personnel has to work under pressure, e.g., the rush at restaurants at breakfast time.

T elicits the following attitudes from Ss: (1) pressure should be handled by the worker as a common happening, as it occurs in many places of business, (2) pressure, when it occurs, should be handled without becoming flustered or angry, (3) personnel should continue to work at the fastest speed without sacrificing quality until the rush or pressure is over.

Ss discuss various situations in which they have felt pressure, how they handled it and whether the job-related attitudes would be useful.

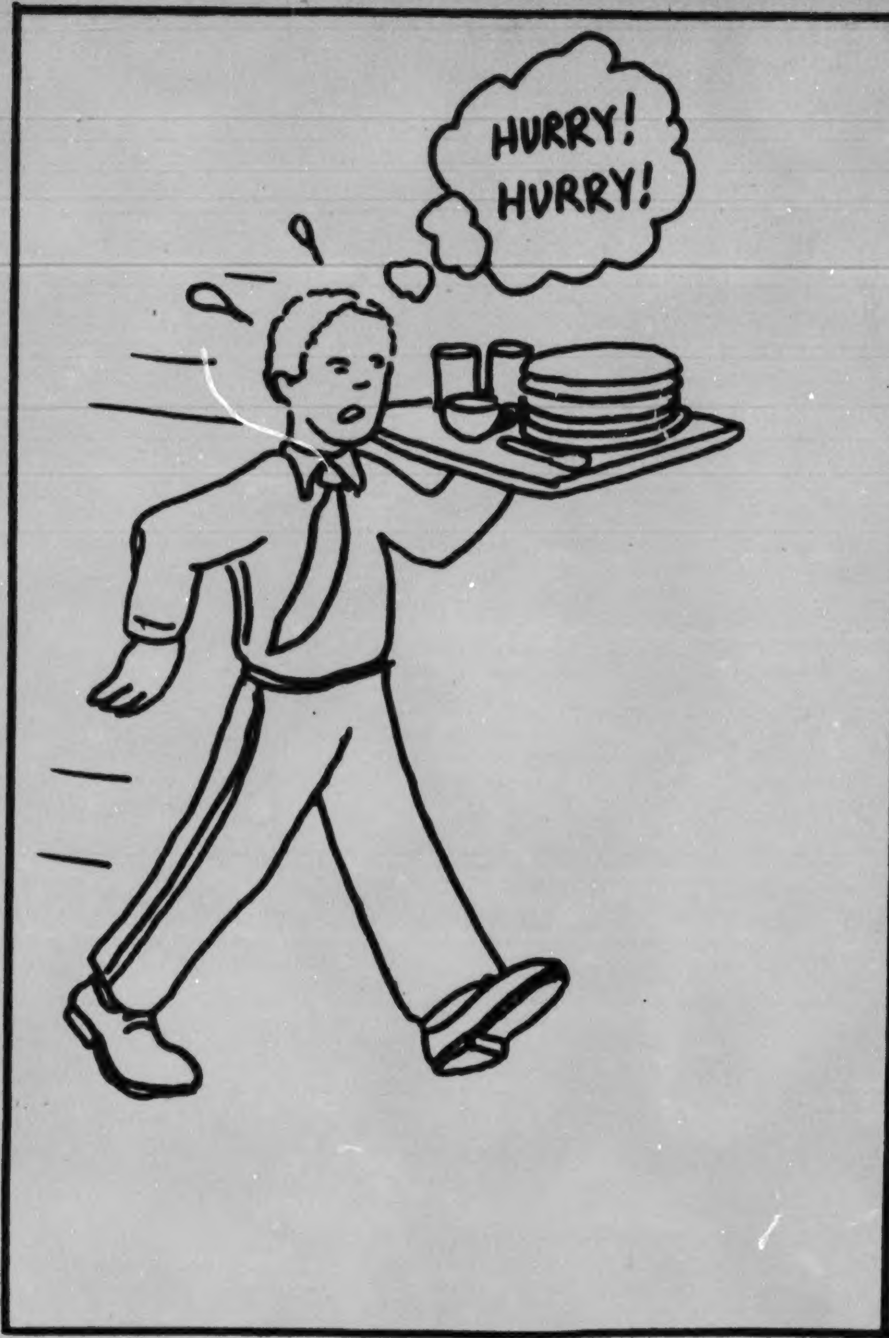
T assigns a task to each S and establishes a deadline until all Ss are working under pressure for at least one-half hour. T makes notes on all Ss in terms of instances when they do not use target behaviors.

T leads Ss in discussion about how they felt and acted when working under pressure. T verbally reinforces and clarifies Ss' perception of their behavior.

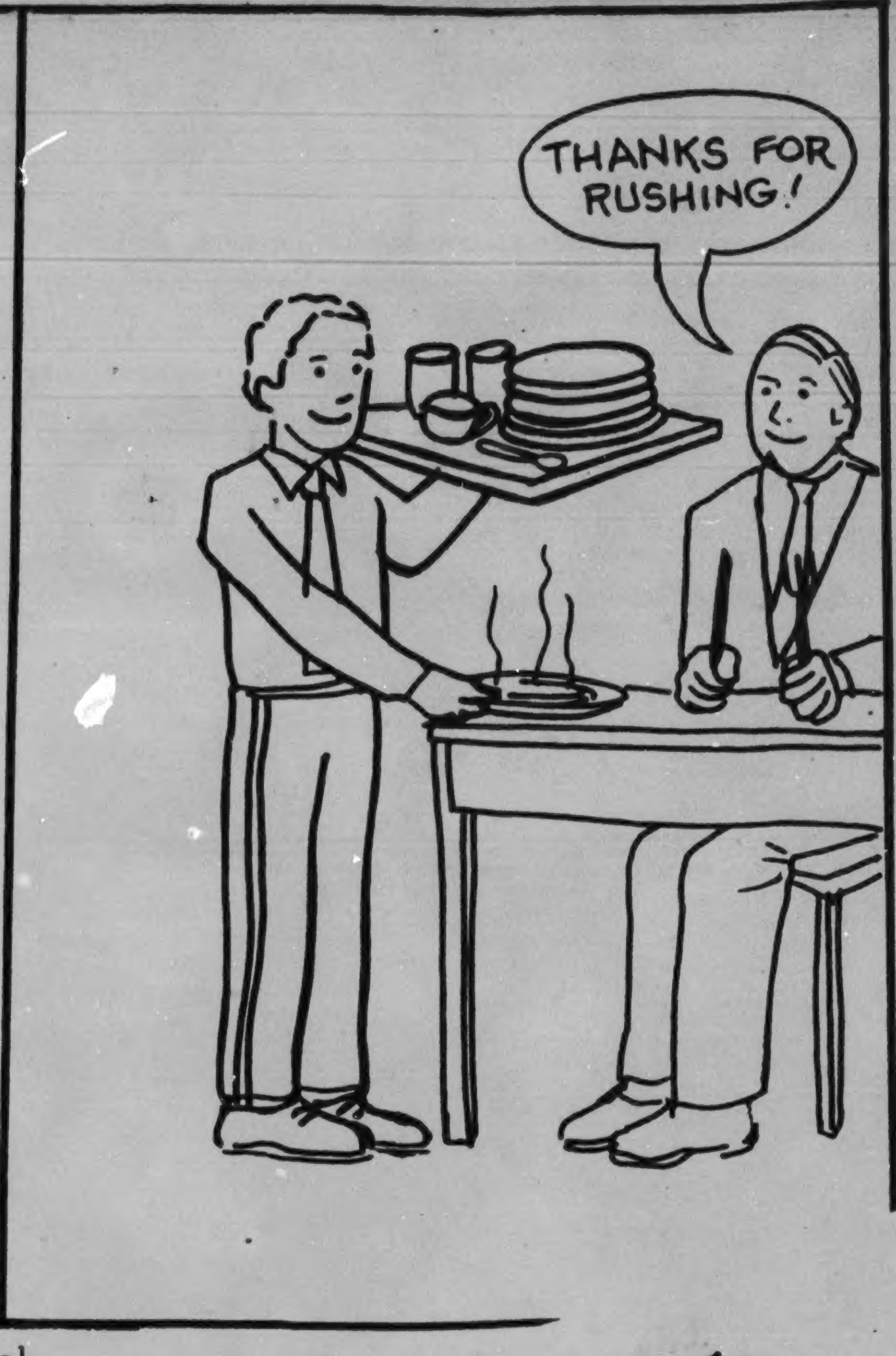
T repeats previous learning sequence, then has Ss discuss their feelings and perceptions of performing the target behaviors under pressure.

PERFORMANCE OBJECTIVE: After completing this topic, S will be able to work under pressure (1) without becoming flustered or angry, and (2) at the fastest speed without sacrificing quality, until he has completed the assigned task or is instructed to stop.

Note: T will evaluate periodically whether S continues to manifest these behaviors.


HURRY! HURRY!

129


THANKS FOR RUSHING!

130

BIBLIOGRAPHY

GENERAL READINGS*

_______ "Analysis of the Differences Between Successful and Non-Successful Students of a Vocational Training Program for the Mentally Retarded in a Comprehensive Rehabilitation Center." Dissertation Abstracts 28(1-A), 121-122, (1967).

_______. Employment of the Mentally Retarded in a Competitive Industrial Setting. Project RD-1036, Albertson, N.Y.: Human Resources Center, 1967.

_______. Exploratory and Evaluative Research in the Vocational Adjustment of the Handicapped. Human Resources Study Number 15, Project RD-1949-G. Albertson, N.Y.: Human Resources Center, 1970.

_______. "ILO/Danish Inter-regional Seminar on Vocational Rehabilitation of the Mentally Handicapped." International Labor Review 105, 189-191, February 1972.

_______. Project for Handicapped Children: A Curriculum Guide for Trainable Mentally Retarded; Title VI. Johnson City, Tenn.: Dunbar Service Center, 1971.

_______. Vocational Assessment and Work Preparation Centers for the Disabled. Washington, D.C.: International Labor Office, 1973.

Angel, Juvenal L. (ed.). Employment Opportunities for the Handicapped. New York: World Trade Academy Press, 1967.

Arthur, Julietta K. Employment for the Handicapped: A Guide for the Disabled, Their Families and Their Counselors. Nashville, Tenn.: Abingdon Press, 1967.

Bae, A. Y. "Factors Influencing Vocational Efficiency of Institutionalized Retardates in Different Training Programs." American Journal of Mental Deficiency. 72 (6), 871-874, (1968).

Beedy, Vernon et al. "A Prevocational and Social Adjustment Program for Educable Retarded Adolescents: A Pilot Project." Milwaukee Media for Rehabilitation Research Reports, Curative Workshop of Milwaukee, University of Wisconsin, no. 10, January 1971.

Biklen, Douglas, and Smith, Elizabeth C. Notes from the Center No. 3: Children with Special Needs and New York State Education Law. Syracuse: Center on Human Policy, Syracuse University Division of Special Education and Rehabilitation, 1972-1973.

Black, Bertram J. Principles of Industrial Therapy for the Mentally Ill. New York: Grune & Stratton, 1970.

Borelli, Alfred. "Occupational Training for Retarded Persons." Mental Retardation 10 (5), October 1972.

Bradley, Betty Hunt et al. Teaching Moderately and Severely Retarded Children: A Diagnostic Approach. Springfield, Ill.: Charles C. Thomas, Publisher, 1971.

Brolin, D. "Value of Rehabilitation Services and Correlates of Vocational Success with the Mentally Retarded." American Journal of Mental Deficiency 76, 644-651, May 1972.

Brolin, D. "Vocational Evaluation: Special Education's Responsibility." Education and Training of the Mentally Retarded 8, no. 1, 12-17, February 1973.

Brolin, D., and Wright, G.N. "Implementing Rehabilitation Recommendations for the Mentally Retarded." American Journal of Mental Deficiency 75, 586-592, 1971.

Carbuhn, W.M., and Well, I.C. "Use of Nonreading Aptitude Tests (NAT B) for Selecting Mental Retardates for Competitive Employment." Measurement and Evaluation in Guidance 5, 460-467, January 1973.

Cobb, Henry V. (ed.). The Forecast of Fulfillment. New York: Teachers College Press, 1972.

Cohen, J.S. et al. Vocational Rehabilitation and the Socially Disabled. Syracuse, N.Y.: Syracuse University Press, 1966.

Cohen, J.S., and Rusalem, H. "Occupational Values of Retarded Students." American Journal of Mental Deficiency 69 (1), 54-61, (1964).

Conley, Ronald W. Economics of Vocational Rehabilitation. Baltimore: Johns Hopkins University Press, 1965.

---

*Sources for materials will be found on page B-37.

Daly, Donald F. Aim for a Job in the Building Trades (Aim High Series). New York: Richards Rosen Press, 1970.

Daniels, L. K. "Experimental Edition of a Rating Scale of Vocational Adjustment for the Mentally Retarded." Training School Bulletin 69, 92-98, August 1972.

Daniels, L. K. Vocational Rehabilitation of the Mentally Retarded: A Book of Readings. Springfield, Ill.: Charles C. Thomas, Publisher, 1973.

Daniels, L. K., and Stewart, J. A. "Development of a Vocational Adjustment Rating Scale for the Mentally Retarded." Training School Bulletin 68, 10-14, May 1971.

DiMichael, S. G. (ed.). New Vocational Pathways for the Mentally Retarded. Washington, D.C.: American Personnel & Guidance Association, 1966.

Durand, J. et al. "Handicapped Become First-Class Citizens at St. Paul's Occupational Training Center." School Shop 32, 32-35, May 1973.

Feldman, Lloyd. The Mentally Retarded: Their Special Training Needs. Manpower Research Bulletin Number 6, Office of Manpower, Automation and Training, Washington, D. C.: U. S. Department of Labor, October 1964.

Ferman, Louis A. Job Development for the Hard-to-Employ. (Policy Papers in Human Resources and Industrial Relations Series, No. 11) Ann Arbor: University of Michigan, Wayne State University Institute of Labor and Industrial Relations, 1969.

Folman, R., and Budoff, M. "Learning Potential and Vocational Aspirations of Retarded Adolescents." Exceptional Children 38, 121-130, October 1971.

Frankel, W. A. "Planning the Vocational Future of the Mentally Retarded." Rehabilitation Literature 22, 98-102, (1961).

Gardner, D. C., and Gardner, P. L. "Ten Suggestions for an Effective EMR Occupation Program." Journal for Special Educators of the Mentally Retarded 9, 90-93, Winter 1973.

Gary, A. L. Comprehensive Vocational Programs for Handicapped Students: Hamilton County Department of Education, Chattanooga, Tenn. Arlington Va.: Council for Exceptional Children, 1971.

Gold, M. W. "Stimulus Factors in Skill Training of Retarded Adolescents on a Complex Assembly Task: Acquisition, Transfer, and Retention." American Journal of Mental Deficiency 76, 517-526, March 1972.

Gorelick, M. C. An Assessment of Vocational Realism of High School and Post-High School Educable Mentally Retarded Adolescents. Los Angeles: Exceptional Children's Foundation, 1966.

Heber, R. F. "A Manual on Terminology and Classification in Mental Retardation." (Revised edition). American Journal of Mental Deficiency 64, 1961.

Jaffe, Abram J. et al. Disabled Workers in the Labor Market. Totowa, N. J.: Bedminster Press, 1964.

Kasper, Sydney. Careers in the Building Trades. New York: Henry Z. Walck, Inc., 1969.

Knight, O. B. "Occupational Aspirations of the Educable Mentally Retarded." Training School Bulletin 69, 54-57, August 1972.

Krauch, V. "Fitting the Handicapped for Jobs: Project Worker, Fullerton Union High School District, California." American Education 8, 28-32, June 1972.

Larson, K. H. "The Characteristics of Vocationally Successful Mentally Retarded Youth as Described by Two Types of Intelligence Tests." Dissertation Abstracts 25(5), 2815, (1964).

Lerner, Lillian, and Moller, Margaret. Helen Greene, Department Store Worker. Chicago: Follett Educational Corporation, Educational Opportunities Division, 1967.

Malikin, David, and Rusalem, Herbert, (eds.). Vocational Rehabilitation of the Disabled: An Overview. New York: New York University Press, 1969.

Mamula, Richard A., and Newman, Nate. Community Placement of the Mentally Retarded. Springfield, Ill.: Charles C. Thomas, Publisher, 1973.

Manus, G. I. et al. Skill Analysis as a Technique for Predicting Vocational Success for the Mentally Retarded. Rehabilitation Series 2, Project RD-2599-P. Albertson, N.Y.: Human Resources Center, 1970.

Meadow, Lloyd, and Greenspan, Eugene. "Employability of Lower Level Mental Retardates." American Journal of Mental Deficiency 65, 623-628, March 1961.

Menchell, Jerome. "Prevocational Evaluation of the Mentally Retarded." Vocational Guidance Quarterly 8, 209-211, Summer 1960.

Miller, W. R. et al. "Occupational Competency in Drafting for Special Needs Learners." Audiovisual Instruction 18, 27-28, April 1973.

Mordock, J. B., and Feldman, R. C. "A Cognitive Process Approach to Evaluating Vocational Potential in the Retarded and Emotionally Disturbed." Rehabilitation Counseling Bulletin 12, 136-143, (1969).

Neuhaus, E. C. "Training the Mentally Retarded for Competitive Employment." Exceptional Children 33, 625-628, (1967).

Robinson, Halbert B., and Robinson, Nancy M. The Mentally Retarded Child: A Psychological Approach. New York: McGraw-Hill Book Company, 1965.

Rosenberg, B. "A New Source of Manpower: The Mentally Retarded." Personnel Administration 30 (6), 15-18, (1967).

Siegal, H., and Haug, E. "Skill Development for the Handicapped." Industrial Arts and Vocational Education 59, 24 September 1970.

Sigler, G. R., and Kokaska. "Job Placement Procedure for the Mentally Retarded." Education and Training of the Mentally Retarded 6, 161-166, December 1971.

Sleith, W. "What a Mentally Retarded Worker Can Do." Supervisory Management, January 1966.

Sniff, William F. A Curriculum for the Mentally Retarded Young Adult. Springfield, Ill.: Charles C. Thomas, Publisher, 1970.

Strickland, C. G. "Job Training Placement for Retarded Youth." Exceptional Children 31, 83-86, (1964).

Sullivan, D. "Job Coordinators of Suffolk County Labor Department; Employment of the Disabled and Educable Mentally Retarded in Competitive Industry." Paper presented at Commack, N.Y., 9 August 1967.

Sullivan, D. "Occupational Opportunities for the Disabled." Paper presented at C. W. Post College, Brookville, N.Y., 17 November 1969.

Tobias, J. "Evaluation of Vocational Potential of Mentally Retarded Young Adults." Training School Bulletin 56, 122-135, (1960).

Towne, Douglas C., and Wallace, Sydney. Vocational Instructional Materials for Students with Special Needs. Portland, Oreg.: Northwest Regional Educational Laboratory, 1972.

Tseng, M. S. "Locus of Control as a Determinant of Job Proficiency, Employability, and Training Satisfaction of Vocational Rehabilitation Clients." Journal of Counseling Psychology 17, 487-491, November 1970.

Waite, Kathleen Barnette. The Trainable Mentally Retarded Child. Springfield, Ill.: Charles C. Thomas, Publisher, 1972.

OCCUPATIONAL BRIEFS:*

________. Aerospace Industries Manufacturing Workers. SRA,[1] Occupational Brief 81, 1969.

________. Air Transportation Occupations. CGP,[2] Occupational Brief 380, 1970.

________. Aluminum Industry Workers. SRA, Occupational Brief 121, 1969.

________. Appliances, Tosco. Maryland State Department of Education, Division of Vocational Education, Special Speech Program.

________. Apprentices. Careers, Inc., Occupational Brief B167, 1972.

________. Apprentices. CGP, Occupational Brief 53, 1971.

________. Auto Body Repairman, Job Corps Training Standard for. Job Corps, Dev./Div., Manpower Adm., US D of L,[3] 1969.

________. Automobile Body Repairmen. SRA, Occupational Brief 301, 1972.

________. Automobile Manufacturing Industry. CGP, Occupational Brief 385, 1971.

________. Automobile Manufacturing Workers. SRA, Occupational Brief 82, 1969.

________. Automobile Mechanic. CGP, Occupational Brief 45, 1971.

________ Automobile Painter. CGP, Occupational Brief 446, 1972.

________. Automotive Body Repairman. CGP, Occupational Brief 96, 1969.

________. Automotive Mechanics. SRA, Occupational Brief 85, 1971.

________. Automotive Parts Counterman. CGP, Occupational Brief 307, 1969.

________. Automotive Service Repairman, Job Corps Training Standard for. Job Corps, Dev./Div. Manpower Adm., US D of L, 1969.

________. Bank Careers. Careers, Inc., Occupational Brief B18, 1972.

________. Bank Workers. SRA, Occupational Brief 11, 1970.

________. Banking Careers. CGP, Occupational Brief 386, 1970.

________. Bindery Worker. CGP, Occupational Brief 261, 1972.

________. Blue Collar Workers in the Federal Service. Careers, Inc., Occupational Brief B188, 1970.

________. Bookkeeping Machine Operator. Careers, Inc., Occupational Brief B104, 1970.

________. Bookkeeping Machine Operators. SRA, Occupational Brief 16, 1971.

________. Bricklayers. SRA, Occupational Brief 22, 1973.

________. Building Construction. South Carolina State Department of Education, Office of Vocational Education.

________. Building Construction Careers. Careers, Inc., Occupational Brief B174, 1973.

________. Building Construction Careers. CGP, Occupational Brief 147, 1973.

________. Building Service Workers. SRA, Occupational Brief 101, 1970.

________. Busboys. SRA, Occupational Brief 317, 1970.

________. Cabinetmaker (Woodworking). CGP, Occupational Brief 230, 1971.

---

*Bibliographic entries are by key word. Sources for materials will be found on page B-37.

[1] Science Research Associates

[2] Chronicle Guidance Publications

[3] Development Division, Manpower Administration, U. S. Department of Labor

_______. Canning and Preserving Industry. CGP, Occupational Brief 389, 1972.

_______. Car Washing Assistant. U of V, Votex,[*] 1970.

_______. Carpenter, Construction. Careers, Inc., Occupational Brief B23, 1972.

_______. Carpenter, Construction, Job Corps Training Standard for. Job Corps, Dev./Div. Manpower Adm., US D of L, 1969.

_______. Carpenter Aid (Small Home Construction). U of V, Votex, 1970.

_______. Carpenters. SRA, Occupational Brief 23, 1972.

_______. Caterers. SRA, Occupational Brief 383, 1971.

_______. Cement Mason. CGP, Occupational Brief 390, 1969.

_______. Cement Mason, Jobs Corps Training Standard for. Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

_______. Cement Masons. SRA, Occupational Brief 170, 1970.

_______. Cleaning and Dyeing Workers. SRA, Occupational Brief 59, 1971.

_______. Clerk, General Office. CGP, Occupational Brief 3, 1969.

_______. Clothing Manufacturing Workers. SRA, Occupational Brief 83, 1972.

_______. Construction, Exploring Your Future in. Sextant Systems, Inc., 1971.

_______. Construction Helpers. Careers, Inc., Occupational Brief B116, 1970.

_______. Construction Laborers. CGP, Occupational Brief 392, 1970.

_______. Construction Machinery Operators. SRA, Occupational Brief 285, 1969.

_______. Cooks and Chefs. SRA, Occupational Brief 115, 1970.

_______. Custodial Maintenance, Job Corps Training Standard for. Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

_______. Custodial Training. Arkansas Children's Colony, McRae Unit.

_______. Custodian (Janitor). CGP, Occupational Brief 245, 1970.

_______. Department Store Occupations. CGP, Occupational Brief 375, 1971.

_______. Department Store Receiving, and Related Occupations. Careers, Inc., Occupational Brief B119, 1970.

_______. Department Store Worker. Follett Publishing Company, Educational Opportunities Division.

_______. Dietary Aid. U of V, Votex, 1970.

_______. Dishmachine Operators, A Course of Instruction for the Training of. Del Mar College, Technical-Vocational Education, 1972.

_______. Dishwasher, Commercial. U of V, Votex, 1971.

_______. Display Workers. SRA, Occupational Brief 40, 1970.

_______. Distributive Education. South Carolina State Department of Education, 1971.

_______. Distributive Occupations for Handicapped Basic Students. New Jersey State Department of Education, Vocational Education for the Handicapped, 1967.

_______. Ditto Master, Preparing and Running off a. U of V, Votex, 1970.

_______. Dry Cleaning Jobs. Careers, Inc., Occupational Brief B22, 1972.

_______. Drycleaning Occupations. CGP, Occupational Brief 65, 1971.

_______. Duplicating Machine Operator/Office Clerk. Job Corps Training Standard for. Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

---

[*] University of Vermont, Votex Department

________. *Duplicating Machine Operators*. SRA, Occupational Brief 17, 1974.

________. *Electrical Equipment Manufacturing Occupations*. CGP, 1971.

________. *Electrician (Construction)*. California State Department of Employment.

________. *Electronics Industry, Assemblers in the*. SRA, Occupational Brief 32, 1969.

________. *Electronics Manufacturing Industry Workers*. CGP, Occupational Brief 57, 1972.

________. *Engine to Start, Preparing*. U of V, Votex, 1970.

________. *Fabrics, Career Opportunities in the World of*. Textile Distributors Association, Inc., 1970.

________. *Factory Operatives, Employment Outlook for*. Bulletin 1650-95, Bureau of Labor Statistics, U. S. Department of Labor, 1970.

________. *File Clerks*. SRA, Occupational Brief 328, 1974.

________. *Floor Care*. U of V, Votex, 1970.

________ *Floor Covering Installer*. CGP, Occupational Brief 401, 1972.

________. *Floor Covering Installers*. SRA, Occupational Brief 14, 1973.

________. *Floral Designer*. California State Department of Employment, 1968.

________. *Floral Designer*. Careers, Inc., Occupational Brief B82, 1973.

________. *Floral Designer*. CGP, Occupational Brief 269, 1971.

________. *Floral Designing as a Career*. Rittner's School, 1968.

________. *Florist Assistant, Job Corps Training Standard for*. Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

________. *Florist's Assistant*. U of V, Votex, 1970.

________. *Florists*. SRA, Occupational Brief 233, 1970.

________. *Food Preparation and Service, Opportunities in*. Vocational Guidance Manuals, 1969.

________. *Food Preparation Occupations, Learning Objectives in*. Alaska Skill Center.

________. *Food Service*. South Carolina State Department of Education, Office of Vocational Education.

________. *Food Service Employee*. Texas Education Agency, Department of Vocational and Adult Education, Division of Homemaking Education, 1969.

________. *Food Service Industry, Careers for Youth in the*. National Restaurant Association, 1969.

________. *Food Store Workers*. SRA, Occupational Brief 117, 1971.

________. *Furniture Manufacturing Occupations*. CGP, Occupational Brief 373, 1971.

________. *Furniture Manufacturing Workers*. SRA, Occupational Brief 124, 1970.

________. *Gardener Job Evaluation Sheets*. Special Needs Program Coordinator, Barre Vocational Technical Center, 1971.

________. *Gardeners and Grounds Keepers*. SRA, Occupational Brief 330, 1973.

________. *Garment Industry Workers*. CGP, Occupational Brief 35, 1973.

________. *Grill, Prepare, Use and Clean*. U of V, Votex, 1970.

________. *Horticulturists*. SRA, Occupational Brief 376, 1972.

________. *Hospital Attendants*. SRA, Occupational Brief 236, 1972.

________. *Hospital Attendants (Assistants to Nurses)*. CGP, Occupational Brief 407, 1970.

________. *Hotel and Motel Industry Occupations*. CGP 408, 1970.

________. *Hotel and Motel Workers*. SRA, Occupational Brief 13, 1970.

______. Hotels and Restaurants, Exploring Your Future in. Sextant Systems, Inc., 1971.

______. House Builder. CGP, Occupational Brief 183, 1972.

______. Household Workers. SRA, Occupational Brief 265, 1970.

______. Housekeeping Aide. U of V, Votex, 1970.

______. Housekeeping Aide Trainee, Laboratory Project for. U of V, Votex, 1970.

______. Ice Cream Manufacturing Workers. SRA, Occupational Brief 173, 1973.

______. Insulation Worker. CGP, Occupational Brief 383, 1973.

______. Iron and Steel Industry, Employment Outlook for the. Bulletin 1650-114, Bureau of Labor Statistics, U.S. Department of Labor, 1970.

______. Janitors, Apartment House. SRA, Occupational Brief 336, 1970.

______. Kitchen Helper. California State Department of Employment, 1968.

______. Knit Goods Industry. CGP, Occupational Brief 413, 1972.

______. Laborers. SRA, Occupational Brief 109, 1974.

______. Landscape Gardener. CGP, Occupational Brief 451, 1971.

______. Lather. CGP, Occupational Brief 414, 1972.

______. Lathers. Careers, Inc., Occupational Brief B138, 1971.

______. Laundry, Operator of a Machine Press and Automatic Shirt Folding Machine in a. U of V, Votex, 1970.

______. Laundry Industry, Job Opportunities in the. American Institute of Laundering, Director of Education and Personnel.

______. Laundry Industry Workers. CGP, Occupational Brief 34, 1972.

______. Laundry Industry Workers. SRA, Occupational Brief 175, 1974.

______. Machining Occupations, Employment Outlook for. Bulletin 1650-98, Bureau of Labor Statistics, U. S. Department of Labor, 1970.

______. Mail Clerk. CGP, Occupational Brief 335, 1971.

______. Maintenance, Building and Grounds. ITJ Junior College, Tupelo Center, Handicapped Program.

______. Maintenance Occupations, Learning Objectives in Building. Alaska Skill Center.

______. Mason's Helper. U of V, Votex, 1970.

______. Meat Packing, Occupations in. California State Department of Employment, 1967.

______. Meat Packing Industry. CGP, Occupational Brief 423, 1971.

______. Meat Packing Industry, Career Opportunities in the. American Meat Institute, 1968.

______. Messenger. CGP, Occupational Brief 275, 1972.

______. Messengers and Office Boys. SRA, Occupational Brief 15, 1970.

______. Nonferrous Metals Industry Workers. SRA, Occupational Brief 269, 1973.

______. Nursery Worker, Landscaper Assistant, Grounds Keeper, Job Corps Training Standard for. Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

______. Office Clerk, General. Careers, Inc., Occupational Brief B62, 1973.

______. Office Education Project, Tosco Simulated. Maryland State Department of Education, Special Speech Program, Division of Vocational Education, 1971.

______. Office Machine Operator. CGP, Occupational Brief 93, 1972.

______. Office Worker. Follett Publishing Company, Educational Opportunities Division.

______. Painter, Construction. CGP, Occupational Brief 20, 1971.

_______. Painter, Construction. Careers, Inc., Occupational Brief B70, 1973.

_______. Painter and Paperhanger, Job Corps Training Standard for. Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

_______. Painter's Helper. U of V, Votex, 1970.

_______. Painters and Paperhangers. SRA, Occupational Brief 87, 1973.

_______. Paper Industry Workers. SRA, Occupational Brief 226, 1974.

_______. Paper Products Manufacturing Occupations. CGP, Occupational Brief 378, 1971.

_______. Petroleum Production and Processing, Employment Outlook for. Bulletin 1650-107, Bureau of Statistics, U. S. Department of Labor, 1970.

_______. Plasterer. University of Toronto, College of Education, 1970.

_______. Plasterer, General. U of V, Votex, 1971.

_______. Plastering, Laboratory Project in. U of V, Votex, 1970.

_______. Plastic Products Manufacturing Workers. CGP, Occupational Brief 370, 1970.

_______. Plastics Industry Workers. SRA, Occupational Brief 125, 1973.

_______. Plumber (Construction). CGP, Occupational Brief 43, 1972.

_______. Plumbers and Pipefitters. SRA, Occupational Brief 88, 1973.

_______. Printing and Publishing Industry. CGP, Occupational Brief 426, 1973.

_______. Recreation Facility Attendant. CGP, Occupational Brief 332, 1970.

_______. Restaurants, Employment Outlook for. Bulletin 1650-123, Bureau of Labor Statistics, U. S. Department of Labor, 1970.

_______. Roofers. SRA, Occupational Brief 299, 1971.

_______. Sales Clerk, Job Corps Training Standard for Retail. Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

_______. School Custodian. U of V, Votex, 1970.

_______. Service Station Attendant. U of V, Votex, 1970.

_______. Service Station Attendant, Job Corps Training Standard for. Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

_______. Service Station Workers. SRA, Occupational Brief 60, 1974.

_______. Sheet Metal Worker. Careers, Inc., Summary Title S56, 1973.

_______. Shipping and Receiving Clerk. California State Department of Employment, 1968.

_______. Shipping and Receiving Clerk. CGP, Occupational Brief 282, 1973.

_______. Shipping Clerks. SRA, Occupational Brief 352, 1970.

_______. Soft Drink Industry Workers. SRA, Occupational Brief 268, 1972.

_______. Soft Ice Cream Machine Preparation, Operation, and Clean-Up. U of V, Votex, 1970.

_______. Stock Clerk. SRA, Occupational Brief 354, 1970.

_______. Stock Clerk, Agricultural Feed and Supplies Store. U of V, Votex, 1970.

_______. Stock Clerk, Job Corps Training Standard for. Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

_______. Stockboy, Laboratory Project for Supermarket. U of V, Votex, 1970.

_______. Stockboy, Supermarket. U of V, Votex, 1970.

_______. Store Clerk, Agricultural Feed and Supplies Store. U of V, Votex, 1970.

_______. *Telephone Industry, Employment Outlook for the.* Bulletin 1650-122, Bureau of Labor Statistics, U. S. Department of Labor. 1970.

_______. *Textile Manufacturing Occupations.* CGP, Occupational Brief 323. 1969.

_______. *Tile Floor Finishing, Laboratory Project in.* U of V, Votex, 1970.

_______. *Trades and Crafts with the Federal Government, Opportunities in.* U. S. Civil Service Commission.

_______. *20,000 Volts Under the Hood* (cassette/slides). Superintendent of Schools, Fort Benton, Montana.

_______. *Waiter (Waitress).* CGP, Occupational Brief 17, 1970.

_______. *Warehouse Workers.* SRA, Occupational Brief 73, 1973.

_______. *Warehouseman.* Careers, Inc., 1967.

_______. *Warehouseman and Materials Handler, Job Corps Training Standard for.* Job Corps, Dev./Div., Manpower Adm., US D of L, 1969.

SOURCES AND ADDRESSES FOR OCCUPATIONAL TRAINING MATERIALS

Abingdon Press
201 Eighth Avenue South
Nashville, TN 37202

Alaska Skill Center
Box 615
Seward, AK 99664

Aluminum Company of America
1501 Alcoa Building
Pittsburgh, PA 15219

Alumnae Advisory Center, Inc.
541 Madison Avenue
New York, NY 10022

American Institute of Laundering
Director of Education and Personnel
Joliet, IL 60434

American Meat Institute
59 East Van Buren Street
Chicago, IL 60605

American Personnel and Guidance Association
Washington, DC 20009

Arkansas Children's Colony
McRae Unit
Alexander, AR 72002

Barre Vocational Technical Center
Barre, VT 05641

California State Department of Employment
800 Capitol Mall
Sacramento, CA 95814

Careers, Inc.
P. O. Box 135
Largo, FL 33540

Chronicle Guidance Publications, Inc.
Moravia, NY 13118

Del Mar College
Technical-Vocational Education
101 Baldwin
Corpus Christi, TX 78404

Dunbar Service Center
Johnson City, TN 37601

Eastman Kodak Company
343 State Street
Rochester, NY 14650

Follett Publishing Company
Educational Opportunities Division
1010 West Washington Boulevard
Chicago, IL 60607

Grune & Stratton, Inc.
757 Third Avenue
New York, NY 10017

Hive Publishing Company
Easton, PA 18042

Interstate Printers and Publishers
19 North Jackson Street
Danville, IL 61832

ITJ Junior College
Tupelo Center
Tupelo, MS 38801

Job Corps
See U. S. Department of Labor, Job Corps

Johns Hopkins University Press
Baltimore, MD 21218

118

Maryland State Department of Education
Division of Vocational Education
Special Speech Program
600 Wyndhurst Avenue
Baltimore, MD 21210

National Easter Seal Society for Crippled Children and Adults
2023 West Ogden Avenue
Chicago, IL 60612

National Restaurant Association
1530 North Lake Shore Drive
Chicago, IL 60610

New Jersey State Department of Education
Vocational Education for the Handicapped
225 State Street West
Trenton, NJ 08608

Northwest Regional Educational Laboratory
700 Lindsay Building
710 Southwest Second Avenue
Portland, OR 97204

Rittner's School
345 Marlborough Street
Boston, MA 02115

Rosen, Richards, Press, Inc.
29 East 21st Street
New York, NY 10010

Science Research Associates
259 East Erie Street
Chicago, IL 60611

Sextant Systems, Inc.
3048 North 34th Street
Milwaukee, WI 53210

South Carolina State Department of Education
908 Rutledge Building
Columbia, SC 29201

Superintendent of Schools
1820 Washington Street
Fort Benton, MT 59442

Syracuse University Press
Box 8, University Station
Syracuse, NY 13210

Teachers College Press
Columbia University
1234 Amsterdam Avenue
New York, NY 10027

Texas Education Agency
Department of Vocational and Adult Education
Division of Homemaking Education
Austin, TX 70761

Textile Distributors Association, Inc.
1040 Avenue of the Americas
New York, NY 10018

Thomas, Charles C., Publisher
301 East Lawrence Avenue
Springfield, IL 62703

U. S. Civil Service Commission
Washington, DC 20005

U. S. Department of Labor,
Bureau of Labor Statistics;
Bulletins are available from
U. S. Government Printing Office
Washington, DC 20402

U. S. Department of Labor
Job Corps, Development Division, Manpower Administration
Patrick Henry Building
601 D Street, N.W.
Washington, DC 20213

U. S. Department of Labor
Office of Manpower, Automation and Training
Washington, DC 20210

University of Toronto
College of Education, Guidance Center
1000 Yonge Street
Toronto 289, ON, Canada

University of Vermont
Votex Department
Burlington, VT 05401

University of Wisconsin
Curative Workshop of Milwaukee
Milwaukee, WI 53201

Vocational Guidance Manuals
Universal Publishing and Distributing Corporation
235 East 45th Street
New York, NY 10017

Walck, Henry Z., Inc.
19 Union Square West
New York, NY 10003

World Trade Academy Press, Inc.
50 East 42nd Street
New York, NY 10017

A Batteryman

- performs the following major tasks:

  removes batteries

  installs new batteries

  cleans batteries, battery cable terminals and battery cable clamps

  charges batteries

- wears a protective uniform while working
- works usually alongside but independently of other workers and in front of customers
- works under informal supervision
- works in an environment that varies from a small crowded shop to a spacious, heavily trafficked area; usually stands while working

TOPIC: Working in Automotive and Auto-Body Repair Occupations

BATTERYMAN

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes work activities in various automotive trade areas which he has visited, seen on film or read about.

S describes how to guard against safety hazards when working in automotive and auto-body repair shops:

- Hold and use electrical equipment correctly; turn equipment off when not in use
- Wear face mask and safety goggles for protection against dust
- Do not brush against, strike or grab objects, to avoid injury from sharp metal edges
- Wear sturdy, oil-resistant shoes to avoid slipping on floors
- Wear face mask and safety goggles, use explosion-proof spray booth if possible, and do not smoke when working with toxic and explosive fumes

S discusses habits a worker must have in order to work safely and productively.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to train and work safely and productively in automotive and auto-body repair occupations.

Note: T will evaluate periodically whether S continues to manifest this behavior.

TOPIC: Working with Industrial Chemicals

BATTERYMAN

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes dangers of working with industrial chemicals and safeguards which must be taken.

S explains why a worker wears a face mask, goggles, smock and gloves as protective measures.

S correctly puts on a face mask, goggles, smock and gloves, and safely works with industrial chemicals.

S explains that one must wash immediately with cold water any part of the body which has come in contact with a chemical.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) explain safeguards required when working with industrial chemicals, (2) put on correctly a face mask, smock, goggles and gloves, and (3) perform assigned task which includes working with chemicals. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Loading and Unloading Hand-Operated and Mechanically Operated Dollies and Carts

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S points out the following types of objects: light and bulky, light and small, heavy and large, heavy and small, and perishable. S makes suggestions concerning the sorting and loading of these objects onto hand-operated and mechanically operated dollies and carts.

S sorts objects into groups of similar types.

S discusses the importance of distributing loads evenly for stability, and of limiting overhang and size of load for safe maneuvering of a stacked dolly or cart.

S demonstrates how to lock or block wheels of a dolly or cart.

S loads each of the following:

- bulky, light objects--distributing objects properly for safe passage through narrow openings
- small, light objects--limiting load size to prevent objects from bouncing off while dolly is in motion
- large, heavy objects--keeping load low for balance
- small, heavy objects--keeping load low for balance
- dissimilar objects--giving consideration to their weight and size in order to prevent damage
- perishable items--limiting the number of layers to avoid damage

S unloads items, placing them in low, stable piles, in designated areas, or on distribution or shipping table.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to (1) load and (2) unload hand-operated and mechanically operated dollies and carts with a large number and variety of objects. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing Battery Cable Clamps from Battery Posts

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S explains that clamp attached to negative battery post must be removed before removing clamp attached to positive battery post.

S loosens battery cable clamp at negative battery post with battery clamp pliers.

S positions special puller on battery cable clamp and cable terminal at negative post of battery.

S pulls clamp from battery.

S repeats procedure at positive post.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) loosen battery cable clamps, (2) position special puller on clamps and cable terminals, and (3) remove cable clamps in appropriate sequence. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning Batteries, Battery Cable Terminals and Battery Cable Clamps

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S cleans surface of battery with a saturated solution of sodium bicarbonate and water.

S removes solid dielectric accumulations from battery posts and contact area of terminals with strong wire brush or scraper.

S removes electrolytic sediment from battery cable clamps by dipping them into saturated solution of sodium bicarbonate and water.

TOPIC: Cleaning Batteries, Battery Cable Terminals and Battery Cable Clamps (cont.) BATTERYMAN

S carefully rinses cleaned surfaces with water.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) clean surfaces of battery and battery cable clamps and (2) remove dielectric accumulations from battery posts and battery cable terminals. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Repl[illegible] Battery Fasteners and Brackets or Clamps

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S selects appropriate wrenches.

S removes threaded fasteners and brackets or clamps that secure battery in battery carrier.

S replaces brackets or clamps and threaded fasteners that hold battery in place.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove and (2) replace threaded fasteners and brackets or clamps that hold battery in battery carrier. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing Batteries from Battery Carriers

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S makes sure that all acid chamber caps are fastened securely.

S lifts battery carefully from battery carrier with one of the tools specially designed for safe lifting of batteries.

S lifts with each type of tool.

Safety Considerations: Keep battery level while lifting and carrying it, to avoid spilling acid contents

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to lift battery from carrier. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing Corrosive Accumulations and Maintaining Battery Carriers

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S removes corrosive accumulations from battery carrier with a solution of sodium bicarbonate and cleans carrier with wire brush and compressed air.

S dries battery carrier, making sure that drain holes are unobstructed.

S paints carrier with acid-resistant coating.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove corrosive accumulations and dry battery carrier, (2) make sure that drain holes are unobstructed, and (3) paint battery carrier with an acid-resistant coating. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Installing New Batteries

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S determines suitability of new battery: proper size, shape, and pole positions, before installing it in specific motor vehicle.

S makes sure that all acid chamber caps are fastened securely.

S carefully installs battery in battery holder.

S tightens clamps on battery holder with appropriate tools.

> Safety Considerations: Keep battery level while lifting and installing it, to avoid spilling acid contents

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) determine whether battery is suitable for installation in a specific vehicle, and, (2) install suitable battery securely. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Charging Batteries

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S connects positive charging cable to positive battery pole and negative charging cable to negative battery pole.

S plugs battery charger into 100-volt AC outlet.

S sets timer and amperage controls of battery charger to prescribed settings.

TOPIC: Charging Batteries (cont.)

S unplugs battery charger from power outlet and disconnects charging cables from battery at completion of charging cycle.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) connect cables properly from battery charger to battery, (2) plug battery charger into a 110-volt AC source, (3) set timer and charging rate, and (4) disconnect battery and charger at completion of charging cycle. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Moving Heavily Loaded Dollies and Carts

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S moves dollies and carts with various loads up and down a grade of two-inch maximum elevation per foot. Ss assist each other if necessary.

S moves carts and dollies through a maze that has been obstructed with manikins to create cross aisles and through doors that have been blocked with cardboard boxes. Several Ss are used to simulate heavy traffic conditions.

S demonstrates moving heavily loaded carts over rough, slippery surfaces. S takes extra care when moving the carts so as not to injure anyone or break or damage anything.

S pulls rather than pushes cart if required.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to move hand-operated or mechanically operated dollies, which are heavily loaded, up and down grades, over rough surfaces and waxed floors, through aisles and doors. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Loading and Unloading Trucks

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S unloads cases from truck and stacks them on cart or dolly. S demonstrates correct posture in lifting and proper procedure for loading different items from truck onto moveable carts and dollies.

S unloads truck with a supermarket gravity-type roll conveyor. S squarely places a case lengthwise on the conveyor, taking care not to push the case at an angle, as it will slide off.

S loads truck efficiently by placing large, heavy items on bottom and light, fragile ones on top, giving careful consideration to proper balancing of load.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to (1) load and (2) unload a truck. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Personal Hygiene and Proper Dress

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S discusses daily rules of personal hygiene which include:

- Taking bath or shower
- Grooming hair and trimming nails
- Using deodorants
- Shaving regularly
- Using cosmetics appropriately
- Cleaning teeth correctly
- Washing hands after using bathroom facilities

S discusses proper dress for males (if relevant):

- Clean sturdy shoes (no canvas or open type)
- Clean underwear
- Clean trousers
- Clean shirt
- Uniform, coveralls, gloves (as required and/or supplied by employer)

S discusses proper dress for females (if relevant):

- Clean, sturdy shoes (no canvas or open type)
- Clean underwear
- Appropriate dress, blouse and skirt, or pantsuit
- Appropriate hosiery
- Uniform, coveralls, gloves (as required and/or supplied by employer)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) follow the daily rules of personal hygiene and (2) dress as required and/or appropriate for working in indicated areas.

Note: T will evaluate periodically whether S continues to manifest this behavior.

A Brake-Drum-Lathe Operator

- performs the following major tasks:

  mounts brake drums on lathe in preparation for resurfacing

  resurfaces frictional surfaces of brake drums

  prepares brake drums for grinding

  removes heat spots from brake drums with grinding machine

- is required to wear a uniform and safety goggles while operating lathe
- works independently of other workers
- works under periodic supervision
- works in an environment that varies from a small crowded shop to a large auto-shop with a high noise level; usually stands

TOPIC: Working in Automotive and Auto-Body Repair Occupations

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes work activities in various automotive trade areas which he has visited, seen on film or read about.

S describes how to guard against safety hazards when working in automotive and auto-body repair shops:

- Hold and use electrical equipment correctly; turn equipment off when not in use
- Wear face mask and safety goggles for protection against dust
- Do not brush against, strike or grab objects, to avoid injury from sharp metal edges
- Wear sturdy, oil-resistant shoes to avoid slipping on floors
- Wear face mask and safety goggles, use explosion-proof spray booth if possible, and do not smoke when working with toxic and explosive fumes

S discusses habits a worker must have in order to work safely and productively.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to train and work safely and productively in automotive and auto-body repair occupations.

Note: T will evaluate periodically whether S continues to manifest this behavior.

TOPIC: Preparing Brake-Drum Lathe for Resurfacing Brake Drums

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S lubricates machine.

S cleans machine with appropriate cleaning solvents and wipers.

S tests on and off switches.

S tests automatic controls and reports to supervisor any malfunction.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) lubricate machine, (2) clean machine with appropriate cleaning solvents and wipers, before and after use, (3) test switches and automatic controls, and (4) report any malfunction to supervisor. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Mounting Front Hub-Mounted Brake Drum on Lathe in Preparation for Resurfacing

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S selects and installs appropriate adapters and spacers with which to center front brake drum on spindle of lathe.

S installs vibration-dampening band on brake drum.

S positions cutting tool on lathe.

S then notifies person in charge that equipment is ready for resurfacing of brake drum.

TOPIC: Mounting Front Hub-Mounted Brake Drum on Lathe in Preparation for Resurfacing (cont.)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) center front hub-mounted brake drum on lathe spindle, (2) install vibration-dampening band on brake drum, and (3) position cutting tool for resurfacing operation. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Mounting Rear Flange-Type Brake Drum on Lathe in Preparation for Resurfacing

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S selects and installs adapters and spacers with which to center rear brake drum on spindle of lathe.

S installs vibration-dampening band on brake drum.

S positions cutting tool on lathe.

S then notifies person in charge that equipment is ready for resurfacing of brake drum.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) center rear flange-type brake drum on lathe spindle, (2) install vibration-dampening band on brake drum, and (3) position cutting tool for resurfacing operation. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Resurfacing Frictional Surfaces of Brake Drums

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S starts brake-drum lathe.

S carefully brings cutting tool in contact with drum.

S positions tool at inner extreme of drum.

S adjusts depth of cut, as instructed by person in charge.

S sets machine to AUTOMATIC and resurfaces brake drum.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) start lathe turning, (2) bring tool in contact with the drum, (3) position tool at inner extreme of drum, (4) adjust depth of cut, as instructed by person in charge, and (5) set machine to AUTOMATIC and resurface brake drum. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing Brake Drum from Lathe Spindle

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S removes spacers, adapters and brake drum from lathe spindle.

S replaces adapters and spacers on their proper storage hooks.

S removes vibration-dampening band from brake drum.

S measures brake drum to within an accuracy of 0.005 inch.

S determines whether brake drum meets requirements of New York State vehicular inspection law.

181

182

TOPIC: Removing Brake Drum from Lathe Spindle (cont.)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove spacers, adapters and brake drum from lathe spindle, (2) replace spacers and adapters on their proper storage hooks, (3) measure drums to within an accuracy of 0.005 inch, and (4) determine whether resurfaced drum meets New York State inspection requirements. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Preparing Brake Drums for Grinding Off Heat Spots

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S clamps grinding wheel on fixture of auto-drum lathe.

S dresses stone to parallel machined surface of brake drum.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) clamp grinding wheel to lathe fixture securely and (2) dress stone to parallel machined surface of brake drum. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing Heat Spots from Brake Drums

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S aligns grinding wheel with inner extremity of machined drum, to grind off heat spots.

S brings spinning wheel into contact with turning drum and adjusts feed screw for depth of grinding.

TOPIC: Removing Heat Spots from Brake Drums (cont.)

S sets machine to AUTOMATIC feed and grinds entire surface of drum.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) align grinding wheel, (2) adjust depth of grinding feed, and (3) adjust machine for AUTOMATIC grinding of entire drum surface. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning Machinery

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S cleans vending machine trimmed with chrome, using a bucket, cleaning solution, brush, cloth and soapy steel wool. S wipes from the top down until the machine has been thoroughly cleaned.

S pays particular attention to cleaning shelf corners and other difficult-to-reach areas.

S rinses machine.

Safety Considerations: Remove vending machine plug from wall outlet
Watch for sharp edges on metal surfaces

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to clean thoroughly machinery such as a vending machine. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Personal Hygiene and Proper Dress

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S discusses daily rules of personal hygiene which include:

- Taking bath or shower
- Grooming hair and trimming nails
- Using deodorants
- Shaving regularly
- Using cosmetics appropriately
- Cleaning teeth correctly
- Washing hands after using bathroom facilities

S discusses proper dress for males (if relevant):

- Clean sturdy shoes (no canvas or open type)
- Clean underwear
- Clean trousers
- Clean shirt
- Uniform, coveralls, gloves (as required and/or supplied by employer)

S discusses proper dress for females (if relevant):

- Clean, sturdy shoes (no canvas or open type)
- Clean underwear
- Appropriate dress, blouse and skirt, or pantsuit
- Appropriate hosiery
- Uniform, coveralls, gloves (as required and/or supplied by employer)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) follow the daily rules of personal hygiene and (2) dress as required and/or appropriate for working in indicated areas.

Note: T will evaluate periodically whether S continues to manifest this behavior.

A Brakeman

- performs the following major tasks:

  removes and replaces brakeshoes

  measures brake drums to make sure they meet State inspection requirements

  checks hydraulic brake lines for leaks or cracks

  adds hydraulic fluid to master cylinder

  replaces wheel cylinders

  reconditions wheel cylinders

  bleeds hydraulic lines

- wears usually a uniform while working
- works usually independently of other workers
- works under close supervision
- works in an environment that varies from a small crowded shop to a large shop with a high noise level; usually stands

TOPIC: Working in Automotive and Auto-Body Repair Occupations

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes work activities in various automotive trade areas which he has visited, seen on film or read about.

S describes how to guard against safety hazards when working in automotive and auto-body repair shops:

- Hold and use electrical equipment correctly; turn equipment off when not in use
- Wear face mask and safety goggles for protection against dust
- Do not brush against, strike or grab objects, to avoid injury from sharp metal edges
- Wear sturdy, oil-resistant shoes to avoid slipping on floors
- Wear face mask and safety goggles, use explosion-proof spray booth if possible, and do not smoke when working with toxic and explosive fumes

S discusses habits a worker must have in order to work safely and productively.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to train and work safely and productively in automotive and auto-body repair occupations.

Note: T will evaluate periodically whether S continues to manifest this behavior.

TOPIC: Lifting Motor Vehicles

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S explains the difference between divided weights of vehicle.

S demonstrates how to use available lifting equipment safely.

S raises vehicle.

S demonstrates how to lower vehicle safely to avoid damaging undercarriage.

S explains difference between sprung and unsprung weight of vehicle.

Safety Considerations: Make sure lifting equipment holds vehicle safely

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to raise motor vehicle safely to prescribed height and rigidity. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Replacing Wheels

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S identifies and selects appropriate tools and equipment to remove wheel.

S lifts motor vehicle with available equipment.

S removes hubcap from wheel rim without damaging finish or shape of hubcap.

S determines if threaded lug fasteners holding wheel to hub are right- or left-hand threads.

TOPIC: Removing and Replacing Wheels (cont.)

S loosens lug fasteners by turning them in appropriate direction.

S replaces wheel and hubcap in reverse order of removal.

Safety Considerations: Do not remove wheels until weight of vehicle is supported safely

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely and efficiently to (1) remove and (2) replace wheel. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Replacing Front Brake Drums

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S raises motor vehicle safely.

S removes wheel.

S removes dust cap from hub.

S removes cotter pin from spindle.

S removes castellated nut, tongue washer and outer bearing from hub.

S removes drum fron spindle.

S replaces front brake drum and all other parts in reverse order of disassembly.

S lowers vehicle.

TOPIC: Removing and Replacing Front Brake Drums (cont.)

Safety Considerations: Make sure lifting equipment holds vehicle safely

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to remove and replace front brake drum. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Working with Industrial Chemicals

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes dangers of working with industrial chemicals and safeguards which must be taken.

S explains why a worker wears a face mask, goggles, smock and gloves as protective measures.

S correctly puts on a face mask, goggles, smock and gloves, and safely works with industrial chemicals.

S explains that one must wash immediately with cold water any part of the body which has come in contact with a chemical.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) explain safeguards required when working with industrial chemicals, (2) put on correctly a face mask, smock, goggles and gloves, and (3) perform assigned task which includes working with chemicals. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning, Repacking, and Adjusting Front Wheel Bearings

BRAKEMAN

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S removes inner bearing and seal from hub.

S cleans bearings with appropriate solvent.

S dries bearings and inspects them for defects.

S repacks bearings with grease, either by hand or with appropriate equipment.

S reinstalls inner bearing and seal.

S places drum and hub on spindle.

S reinstalls outer bearing, tongue washer, spindle nut.

S adjusts bearing preload, reinstalls cotter pin, dust cap and wheel.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove inner bearing and seal from hub, (2) clean and inspect bearings, (3) repack them with grease, (4) adjust bearing preload, and (5) reinstall bearings and all other parts in reverse order of disassembly. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Replacing Brakeshoes of Internal Expanding Brakes on Front Wheels Without Automatic Self-Adjusters

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S removes brakeshoe pull-back and hold-down springs.

S removes brakeshoes with lower spring and adjustment assembly.

S separates shoes from adjuster and spring.

S assembles shoes, adjuster and spring.

S installs shoes on backing plate, with upper end of shoes resting against pin, and wheel cylinder push rods placed in their notches.

S installs brakeshoe pull-back and hold-down springs.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove pull-back springs, hold-down springs, lower spring, and adjustment assembly, (2) separate shoes, (3) install new shoes, and (4) follow prescribed reinstallation procedure. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Measuring Brake Drums for Acceptability Under State Inspection Law

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S measures diameter of brake drum to nearest 1/2 in.

S adjusts brake drum dial indicator gauge to measure size of drum accurately to within a tolerance of plus or minus 0.005 in.

S records findings or reports them to person in charge.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) measure brake drum to prescribed tolerance, (2) determine whether brake drum is machinable, and (3) record findings or report them to person in charge. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Inspecting Hydraulic Brake Lines for Leaks or Cracks

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S inspects hydraulic brake lines for leaks or cracks.

S identifies hydraulic leaks or cracks--if any.

S identifies defective flexible brake hoses.

S reports leaks or cracks to person in charge.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) identify and locate leaks or cracks in hydraulic brake lines and (2) report defects to person in charge. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Adjusting Brakes and Checking Fluid Level in Master Cylinder **BRAKEMAN**

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S locates and uncovers adjusting holes in backing plate.

S turns adjusting star wheel with brake spoon until wheel no longer turns.

S turns adjusting star wheel with brake spoon in opposite direction until wheel is just free to turn.

S repeats procedure on all four wheels and replaces adjusting hole covers.

S removes cover from master cylinder, fills reservoir to within 1/4 in. of top and replaces cover on master cylinder.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) adjust all four wheels until desired pedal height is obtained, with all four wheels free to turn, and (2) fill reservoir of master cylinder to required capacity. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Replacing Rear Brake Drums

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S raises rear of vehicle by its sprung weight.

S removes wheel.

S removes brake drum.

S replaces brake drum, wheel and hubcap.

S lowers motor vehicle.

TOPIC: Removing and Replacing Rear Brake Drums (cont.)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove and (2) replace rear brake drum. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Inspecting Brake Wheel Cylinders for Leaks and Brake Linings for Required Thickness

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S pulls dust covers away from both ends of wheel cylinder to check for evidence of hydraulic brake fluid leakage past pistons.

S replaces dust covers in original positions.

S measures brake lining thickness with appropriate instruments.

S determines if vehicle passes State inspection laws governing cylinder leakage and lining thickness.

S reports findings to person in charge.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) check cylinders for leakage, (2) brake linings for required thickness, (3) determine whether motor vehicle meets legal requirements, and (4) report findings to person in charge. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Bleeding Brakes

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S locates bleeder valves.

S chooses appropriate tools for opening and closing valves.

S, with aid of another S, or person in charge, removes all air from hydraulic system by bleeding all four wheel cylinders.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to bleed hydraulic brake system with aid of another S or person in charge. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Replacing Front Wheel Cylinders

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S unfastens front wheel cylinder from brake backing plate and flexible brake line.

S attaches new front wheel cylinder to flexible brake line and brake backing plate.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove and (2) replace a front wheel cylinder of an internal expanding hydraulic brake. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Replacing Rear Wheel Cylinders

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S detaches solid brake line from rear wheel cylinder.

S detaches rear wheel cylinder from backing plate.

S fastens new rear wheel cylinder to backing plate.

S reattaches solid brake line to wheel cylinder, taking particular care not to crossthread compression fitting.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove and (2) install a rear wheel brake cylinder. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Reconditioning Wheel Cylinders

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S disassembles wheel cylinder.

S cleans all sediment from cylinder bore and inspects cylinder bore for deep pitting or extensive rust.

S installs new parts and reassembles wheel cylinder.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) disassemble a wheel cylinder, (2) prepare cylinder bore for reassembly, and (3) reassemble cylinder. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Loading and Unloading Trucks

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S unloads cases from truck and stacks them on cart or dolly. S demonstrates correct posture in lifting and proper procedure for loading different items from truck onto moveable carts and dollies.

S unloads truck with a supermarket gravity-type roll conveyor. S squarely places a case lengthwise on the conveyor, taking care not to push the case at an angle, as it will slide off.

S loads truck efficiently by placing large, heavy items on bottom and light, fragile ones on top, giving careful consideration to proper balancing of load.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to (1) load and (2) unload a truck. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Personal Hygiene and Proper Dress

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S discusses daily rules of personal hygiene which include:

- Taking bath or shower
- Grooming hair and trimming nails
- Using deodorants
- Shaving regularly
- Using cosmetics appropriately
- Cleaning teeth correctly
- Washing hands after using bathroom facilities

S discusses proper dress for males (if relevant):

- Clean sturdy shoes (no canvas or open type)
- Clean underwear
- Clean trousers
- Clean shirt
- Uniform, coveralls, gloves (as required and/or supplied by employer)

S discusses proper dress for females (if relevant):

- Clean, sturdy shoes (no canvas or open type)
- Clean underwear
- Appropriate dress, blouse and skirt, or pantsuit
- Appropriate hosiery
- Uniform, coveralls, gloves (as required and/or supplied by employer)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) follow the daily rules of personal hygiene and (2) dress as required and/or appropriate for working in indicated areas.

Note: T will evaluate periodically whether S continues to manifest this behavior.

An Exhaust-System-Parts Changer

- performs the following major tasks:
    - removes and replaces "U" type clamps and exhaust system hangers
    - resizes exhaust connections
    - removes and replaces tail pipes, mufflers, and exhaust pipes
- is required to work overhead while lying on his back
- wears a uniform and safety goggles while working
- works usually independently of other workers
- works under informal supervision
- works usually under a motor vehicle, indoors or outdoors, under varying climatic conditions, in an environment that is noisy

TOPIC: Working in Automotive and Auto-Body Repair Occupations

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes work activities in various automotive trade areas which he has visited, seen on film or read about.

S describes how to guard against safety hazards when working in automotive and auto-body repair shops:

- Hold and use electrical equipment correctly; turn equipment off when not in use
- Wear face mask and safety goggles for protection against dust
- Do not brush against, strike or grab objects, to avoid injury from sharp metal edges
- Wear sturdy, oil-resistant shoes to avoid slipping on floors
- Wear face mask and safety goggles, use explosion-proof spray booth if possible, and do not smoke when working with toxic and explosive fumes

S discusses habits a worker must have in order to work safely and productively.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to train and work safely and productively in automotive and auto-body repair occupations.

Note: T will evaluate periodically whether S continues to manifest this behavior.

TOPIC: Removing and Replacing "U" Type Clamps

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S applies penetrating liquid to threaded fasteners.

S removes "U" type clamp with appropriate wrench at exhaust connections.

S removes connecting clamp if threaded fastener breaks.

S installs new "U" type clamp.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove defective "U" type clamp from exhaust system and (2) install new "U" type clamp. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Replacing Exhaust System Hangers

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S saturates threaded fasteners with penetrating liquid.

S removes faulty hanger or bracket with appropriate wrench from chassis and exhaust system.

S installs new hanger or bracket.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) saturate fasteners with penetrating liquid, (2) remove faulty hanger or bracket, and (3) install new hanger. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Separating Sections of Exhaust Systems

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S heats connecting pipes with electric heater or gas torch.

S separates sections of exhaust system when crimped or rusted connections are heated sufficiently to separate them with little effort.

Safety Considerations: Wear protective insulated gloves
Wear protective face mask when using gas torch

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) apply heat to connecting pipes and (2) separate connections. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Resizing or Reshaping Exhaust Connections for Refitting and Reinstallation

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S restores pipe connection to original size and shape with reamer of appropriate size.

S matches restored parts and reassembles them.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) resize or reshape sections of exhaust systems to original size and shape and (2) refit and reinstall exhaust sections. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

223

224

TOPIC: Removing and Replacing Tail Pipes

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S determines before installation whether replacement part will fit by comparing it with old part.

S removes defective pipe.

S installs new part.

S tightens all fittings with appropriate tools.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) select proper tail pipe replacement, (2) remove defective tail pipe, (3) install new part, and (4) tighten all fittings. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Replacing Mufflers and Resonators

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S determines before installation whether replacement part will fit by comparing it with old part.

S removes defective part.

S installs new part.

S tightens all fittings of assembly with appropriate tools.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) select proper replacement part, (2) remove defective part and (3) install new part. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Removing and Replacing Exhaust Pipes

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S determines before installation whether replacement part will fit by comparing it with old part.

S chooses appropriate hand tools to disconnect exhaust pipe from exhaust manifold.

S removes defective exhaust pipe.

S removes remnants of old gaskets from exhaust manifold.

S installs new gaskets and exhaust pipe, making sure that new parts will not interfere with other assemblies of vehicle.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) select proper replacement part, (2) remove defective exhaust pipe and gasket, and (3) install new parts. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Separating Exhaust System Sections with Special Hand Chisels

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S identifies and selects special hand chisels needed to separate exhaust system sections.

S separates exhaust system sections with hand chisels and hammer.

S avoids damaging reusable parts.

Safety Considerations: Wear safety goggles to protect eyes from injury

TOPIC: Separating Exhaust System Sections with Special Hand Chisels (cont.)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to separate sections of exhaust systems carefully, to prevent damage to reusable parts. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Separating Exhaust System Sections with Pneumatic-Powered Tools and Chisels

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S identifies and selects special tools needed to separate exhaust system sections.

S separates exhaust system sections with pneumatic-powered tools and chisels.

S avoids damaging reusable parts.

Safety Considerations: Wear safety goggles to protect eyes from flying rust or metal slivers

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to separate sections of exhaust systems carefully, to prevent damage to reusable parts. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S unloads cases from truck and stacks them on cart or dolly. S demonstrates correct posture in lifting and proper procedure for loading different items from truck onto moveable carts and dollies.

S unloads truck with a supermarket gravity-type roll conveyor. S squarely places a case lengthwise on the conveyor, taking care not to push the case at an angle, as it will slide off.

S loads truck efficiently by placing large, heavy items on bottom and light, fragile ones on top, giving careful consideration to proper balancing of load.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to (1) load and (2) unload a truck. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Personal Hygiene and Proper Dress

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S discusses daily rules of personal hygiene which include:

- Taking bath or shower
- Grooming hair and trimming nails
- Using deodorants
- Shaving regularly
- Using cosmetics appropriately
- Cleaning teeth correctly
- Washing hands after using bathroom facilities

S discusses proper dress for males (if relevant):

- Clean sturdy shoes (no canvas or open type)
- Clean underwear
- Clean trousers
- Clean shirt
- Uniform, coveralls, gloves (as required and/or supplied by employer)

S discusses proper dress for females (if relevant):

- Clean, sturdy shoes (no canvas or open type)
- Clean underwear
- Appropriate dress, blouse and skirt, or pantsuit
- Appropriate hosiery
- Uniform, coveralls, gloves (as required and/or supplied by employer)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) follow the daily rules of personal hygiene and (2) dress as required and/or appropriate for working in indicated areas.

Note: T will evaluate periodically whether S continues to manifest this behavior.

A Lubrication Man

- performs the following major tasks:
  - lubricates grease fittings, hinges and locks
  - checks oil level in fittings
  - fills out lubrication stickers
- is required often to work overhead
- wears a uniform while working
- works usually independently of other workers
- works under informal supervision
- works usually indoors in an environment that is often cramped and dirty

TOPIC: Working in Automotive and Auto-Body Repair Occupations

LUBRICATION MAN

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes work activities in various automotive trade areas which he has visited, seen on film or read about.

S describes how to guard against safety hazards when working in automotive and auto-body repair shops:

- Hold and use electrical equipment correctly; turn equipment off when not in use
- Wear face mask and safety goggles for protection against dust
- Do not brush against, strike or grab objects, to avoid injury from sharp metal edges
- Wear sturdy, oil-resistant shoes to avoid slipping on floors
- Wear face mask and safety goggles, use explosion-proof spray booth if possible, and do not smoke when working with toxic and explosive fumes

S discusses habits a worker must have in order to work safely and productively.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to train and work safely and productively in automotive and auto-body repair occupations.

Note: T will evaluate periodically whether S continues to manifest this behavior.

TOPIC: Lubricating Grease Fittings of Moving Parts

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S locates and identifies grease fittings and grease nipples.

S cleans grease fittings.

S, by consulting lubrication guide, determines type of lubricant required for special fittings.

S lubricates moving parts with required lubricant.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) locate and (2) clean grease fittings, and (3) inject lubricant into fittings in quantities prescribed. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Lubricating Hinges and Locks

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S lubricates door hinges and hood hinges with liquid lubricant.

S lubricates door striker plates with stick lubricant.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to lubricate (1) motor vehicle door hinges, (2) hood hinges, and (3) door striker plates. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Measuring Differential Lubricant Level

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S removes differential filler plug.

S determines whether lubricant must be added.

S fills differential with prescribed lubricant to prescribed level if level is low.

S replaces differential filler plug.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) determine whether lubricant must be added, (2) fill differential gear box with appropriate lubricant if level is low, and (3) replace differential filler plug. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Completing Information on Lubrication Stickers

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S records mileage, as indicated on odometer, on lubrication sticker.

S records date on lubrication sticker.

S checks off all serviced items listed on lubrication sticker.

S attaches sticker to door edge or post.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) record mileage, date and all services performed and (2) attach sticker to door edge or post. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning Machinery

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S cleans vending machine trimmed with chrome, using a bucket, cleaning solution, brush, cloth and soapy steel wool. S wipes from the top down until the machine has been thoroughly cleaned.

S pays particular attention to cleaning shelf corners and other difficult-to-reach areas.

S rinses machine.

Safety Considerations: Remove vending machine plug from wall outlet
Watch for sharp edges on metal surfaces

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to clean thoroughly machinery such as a vending machine. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Loading and Unloading Hand-Operated and Mechanically Operated Dollies and Carts

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S points out the following types of objects: light and bulky, light and small, heavy and large, heavy and small, and perishable. S makes suggestions concerning the sorting and loading of these objects onto hand-operated and mechanically operated dollies and carts.

S sorts objects into groups of similar types.

S discusses the importance of distributing loads evenly for stability, and of limiting overhang and size of load for safe maneuvering of a stacked dolly or cart.

S demonstrates how to lock or block wheels of a dolly or cart.

S loads each of the following:

- bulky, light objects--distributing objects properly for safe passage through narrow openings
- small, light objects--limiting load size to prevent objects from bouncing off while dolly is in motion
- large, heavy objects--keeping load low for balance
- small, heavy objects--keeping load low for balance
- dissimilar objects--giving consideration to their weight and size in order to prevent damage
- perishable items--limiting the number of layers to avoid damage

S unloads items, placing them in low, stable piles, in designated areas, or on distribution or shipping table.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to (1) load and (2) unload hand-operated and mechanically operated dollies and carts with a large number and variety of objects. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Moving Heavily Loaded Dollies and Carts

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S moves dollies and carts with various loads up and down a grade of two-inch maximum elevation per foot. Ss assist each other if necessary.

S moves carts and dollies through a maze that has been obstructed with manikins to create cross aisles and through doors that have been blocked with cardboard boxes. Several Ss are used to simulate heavy traffic conditions.

S demonstrates moving heavily loaded carts over rough, slippery surfaces. S takes extra care when moving the carts so as not to injure anyone or break or damage anything.

S pulls rather than pushes cart if required.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to move hand-operated or mechanically operated dollies, which are heavily loaded, up and down grades, over rough surfaces and waxed floors, through aisles and doors. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Personal Hygiene and Proper Dress

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S discusses daily rules of personal hygiene which include:

- Taking bath or shower
- Grooming hair and trimming nails
- Using deodorants
- Shaving regularly
- Using cosmetics appropriately
- Cleaning teeth correctly
- Washing hands after using bathroom facilities

S discusses proper dress for males (if relevant):

- Clean sturdy shoes (no canvas or open type)
- Clean underwear
- Clean trousers
- Clean shirt
- Uniform, coveralls, gloves (as required and/or supplied by employer)

S discusses proper dress for females (if relevant):

- Clean, sturdy shoes (no canvas or open type)
- Clean underwear
- Appropriate dress, blouse and skirt, or pantsuit
- Appropriate hosiery
- Uniform, coveralls, gloves (as required and/or supplied by employer)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) follow the daily rules of personal hygiene and (2) dress as required and/or appropriate for working in indicated areas.

Note: T will evaluate periodically whether S continues to manifest this behavior.

A New-Car Get-Ready Man

- performs the following major tasks:

  washes and dries motor vehicles manually

  waxes and polishes motor vehicles manually

  cleans interiors of motor vehicles

  reports damages and defects to person in charge

- is required often to wear a uniform while working
- works usually independently of other workers
- works under informal supervision
- works in an environment that varies from a cramped work area to a spacious auto-repair shop; moves about or stands most of the time

TOPIC: Working in Automotive and Auto-Body Repair Occupations

NEW-CAR GET-READY MAN

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes work activities in various automotive trade areas which he has visited, seen on film or read about.

S describes how to guard against safety hazards when working in automotive and auto-body repair shops:

- Hold and use electrical equipment correctly; turn equipment off when not in use
- Wear face mask and safety goggles for protection against dust
- Do not brush against, strike or grab objects, to avoid injury from sharp metal edges
- Wear sturdy, oil-resistant shoes to avoid slipping on floors
- Wear face mask and safety goggles, use explosion-proof spray booth if possible, and do not smoke when working with toxic and explosive fumes

S discusses habits a worker must have in order to work safely and productively.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to train and work safely and productively in automotive and auto-body repair occupations.

Note: T will evaluate periodically whether S continues to manifest this behavior.

TOPIC: Preparing to Wash Motor Vehicles Manually

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S readies required equipment, such as water pail, sponge, hose, and appropriate soap.

S measures proper amount of soap to add to pail.

S adds soap to pail.

S fills pail with warm water.

S makes sure that all windows of motor vehicle are closed.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) ready required washing equipment, (2) measure proper amount of soap to add to pail, (3) add soap to pail, (4) fill pail with warm water, and (4) make sure that all windows of motor vehicle are closed. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Washing Motor Vehicles Manually

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S hoses surface of motor vehicle.

S applies sudsy water to roof of motor vehicle, making sure always to wash vehicles from top down.

S rinses roof.

S continues to wash motor vehicle doing hood and front fenders next.

S rinses each section as it is cleaned.

S washes trunk lid and rinses.

S washes and rinses bumpers, hubcaps and wheels last, explaining that these areas are the most heavily soiled.

Safety Considerations: Walk carefully on slippery floors
Avoid getting soap in eyes
Wipe sharp metal edges on vehicle carefully to avoid bruises or cuts

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to wash vehicle manually by (1) first wetting its entire surface, (2) working from top down, and (3) rinsing each section after it has been cleaned. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Drying Washed Motor Vehicles

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S uses towel or sponge to dry motor vehicle.

S wipes car from top down.

S rinses sponge or towel after wiping each section.

S wipes bumpers, hubcaps and wheels last and explains the reason.

Safety Considerations: Wipe sharp metal edges on vehicle carefully to avoid bruises or cuts

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) dry vehicle with towel or sponge from top down, (2) rinse towel or sponge after wiping each section, and (3) wipe bumpers, hubcaps and wheels last. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Hand-Waxing and Polishing Motor Vehicles

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S makes sure that freshly washed and dried vehicle is not standing in direct sunlight.

S waxes vehicle, beginning with vehicle roof.

S uses a damp cloth to apply liquid or nonliquid wax to surface of roof, covering approximately an 18-inch area.

S rubs waxed surface, using a buffing cloth, to a high uniform gloss after wax has dried.

S waxes and polishes entire vehicle, following above procedure.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) wax vehicle after determining that it is not standing in direct sunlight; (2) apply wax to small sections at a time beginning with roof of vehicle, and (3) rub surface to high, uniform gloss after wax has dried. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning Interiors of Motor Vehicles

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S empties ashtrays and sweeps loose dirt from floor of motor vehicle.

S vacuums upholstery and floor.

S dusts dashboard and all other metal, plastic and glass surfaces, using cloth.

S reports discovery of any damage in interior of motor vehicle to supervisor.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) empty ashtrays, (2) sweep loose dirt from floor, (3) vacuum upholstery and floor, (4) dust dashboard and other surfaces, and (5) report any damage to supervisor. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

264

263

TOPIC: Sweeping and Mopping Floors and Walks

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S sweeps floor with hair broom, using pushing strokes of two or three feet. S takes care to clean corners and tight spaces.

S scrapes heavy debris, such as gum, from floor.

S dips mop into cleaning solution, wrings well and mops in four to six arcs, pressing down on dirty spots.

S mops from windows or farthest point toward door.

S steps backward as he mops to avoid walking on cleaned area.

S uses narrow push broom and employs a pulling motion rather than a side-to-side motion when cleaning walks and narrow spaces.

Safety Considerations: Keep hands away from wringer except to press handle
Observe caution regarding overhead lights when lifting mop from wringer
Rope off wet floors
Don't leave broom standing against wall

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) sweep floors, walks and narrow areas, (2) remove heavy debris, such as gum, by scraping, and (3) mop floors, walks and narrow spaces. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Personal Hygiene and Proper Dress

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S discusses daily rules of personal hygiene which include:

- Taking bath or shower
- Grooming hair and trimming nails
- Using deodorants
- Shaving regularly
- Using cosmetics appropriately
- Cleaning teeth correctly
- Washing hands after using bathroom facilities

S discusses proper dress for males (if relevant):

- Clean sturdy shoes (no canvas or open type)
- Clean underwear
- Clean trousers
- Clean shirt
- Uniform, coveralls, gloves (as required and/or supplied by employer)

S discusses proper dress for females (if relevant):

- Clean, sturdy shoes (no canvas or open type)
- Clean underwear
- Appropriate dress, blouse and skirt, or pantsuit
- Appropriate hosiery
- Uniform, coveralls, gloves (as required and/or supplied by employer)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) follow the daily rules of personal hygiene and (2) dress as required and/or appropriate for working in indicated areas.

Note: T will evaluate periodically whether S continues to manifest this behavior.

A Service-Station Attendant

- performs the following major tasks:
  - fills motor vehicle fuel tanks
  - checks various oil and fluid levels under engine hood
  - checks tires
  - cleans windshields
  - maintains interior and exterior areas of service station
  - stocks sales and supply shelves
- wears usually a uniform and sometimes foul-weather gear while working
- works usually independently of other workers
- works both indoors and outdoors under varying climatic conditions; moves about or stands most of the time

TOPIC: Working in Automotive and Auto-Body Repair Occupations

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes work activities in various automotive trade areas which he has visited, seen on film or read about.

S describes how to guard against safety hazards when working in automotive and auto-body repair shops:

- Hold and use electrical equipment correctly; turn equipment off when not in use
- Wear face mask and safety goggles for protection against dust
- Do not brush against, strike or grab objects, to avoid injury from sharp metal edges
- Wear sturdy, oil-resistant shoes to avoid slipping on floors
- Wear face mask and safety goggles, use explosion-proof spray booth if possible, and do not smoke when working with toxic and explosive fumes

S discusses habits a worker must have in order to work safely and productively.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to train and work safely and productively in automotive and auto-body repair occupations.

Note: T will evaluate periodically whether S continues to manifest this behavior.

TOPIC: Handling Chemical Cleaning Agents

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S identifies various chemical cleaning agents: cleaning powders, window cleaners, floor cleaners and aerosol dispensers. S handles each agent carefully as it can be very harmful to the eyes, skin and mouth. S shakes aerosol dispensers as required before using. S points dispenser toward object.

S determines use of cleaning agent.

S explains that if any chemical cleaning agent touches skin or particularly the eyes, S must immediately rinse with water from closest available faucet and advise person in charge.

S, using proper cleaner and wearing rubber gloves for protection, spot-cleans window, floor area or table.

Safety Considerations: Do not leave aerosol dispensers near heat or radiators

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able properly to (1) select cleaning agents and (2) clean a window, floor area and table safely. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Filling Motor Vehicle Fuel Tanks

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S points out location of fuel tank caps on various models of motor vehicles.

S returns dispenser meters to zero.

S unscrews fuel tank cap.

S inserts dispenser nozzle in fuel tank.

S determines how much fuel the customer desires.

S activates dispenser pump and fills fuel tank to level or quantity specified by customer.

S stops dispenser pump and hangs dispenser nozzle onto dispensing pump.

S replaces fuel tank cap.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) locate fuel tank of vehicle, (2) return dispenser meters to zero, (3) unscrew fuel tank cap, (4) insert nozzle in fuel tank, (5) activate pump, filling fuel tank to specified level or quantity, (6) stop pump and hang dispenser nozzle onto pump, and (7) replace fuel tank cap. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Opening and Closing Engine Hoods

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S demonstrates how to operate latching mechanisms of various hoods.

S closes hoods securely without damaging or marring vehicles.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) operate latching mechanisms of various hoods and (2) close hoods securely without damaging or marring vehicles. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Checking Oil and Fluid Levels Under Engine Hood

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes the various oil and fluid levels under engine hood which must be checked.

S measures level of oil in crankcase.

S measures level of automatic transmission and power steering fluids.

S measures level of water in cooling system and level of distilled water in battery.

S measures level of brake fluid in master cylinder.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) describe various oil and fluid levels which must be checked and (2) measure oil level in crankcase, fluid levels of automatic transmission and power steering mechanism, water levels in cooling system and battery, and brake fluid level in master cylinder. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning Motor Vehicle Windows

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S wets window with sponge saturated with detergent fluid.

S squeegees glass panel, removing all applied detergent and soil.

S dries damp spots missed by squeegee with clean cloth or paper towel.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) wet window with sponge and (2) squeegee the entire window without leaving spots. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Inflating Tires

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S measures air pressure in tire with a variety of available tire gauges.

S removes air from tire with end of gauge, or adds air pressure with pneumatic hose and fitting, according to need.

S rechecks pressure to make sure it conforms to manufacturer's specification.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) check tire air pressure, (2) either remove or add air, and (3) recheck pressure to make sure it conforms to manufacturer's specification. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning Machinery

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S cleans vending machine trimmed with chrome, using a bucket, cleaning solution, brush, cloth and soapy steel wool. S wipes from the top down until the machine has been thoroughly cleaned.

S pays particular attention to cleaning shelf corners and other difficult-to-reach areas.

S rinses machine.

Safety Considerations: Remove vending machine plug from wall outlet
Watch for sharp edges on metal surfaces

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to clean thoroughly machinery such as a vending machine. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Loading and Unloading Trucks

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S unloads cases from truck and stacks them on cart or dolly. S demonstrates correct posture in lifting and proper procedure for loading different items from truck onto moveable carts and dollies.

S unloads truck with a supermarket gravity-type roll conveyor. S squarely places a case lengthwise on the conveyor, taking care not to push the case at an angle, as it will slide off.

S loads truck efficiently by placing large, heavy items on bottom and light, fragile ones on top, giving careful consideration to proper balancing of load.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to (1) load and (2) unload a truck. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Loading and Unloading Hand-Operated and Mechanically Operated Dollies and Carts

SERVICE-STATION ATTENDANT

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S points out the following types of objects: light and bulky, light and small, heavy and large, heavy and small, and perishable. S makes suggestions concerning the sorting and loading of these objects onto hand-operated and mechanically operated dollies and carts.

S sorts objects into groups of similar types.

S discusses the importance of distributing loads evenly for stability, and of limiting overhang and size of load for safe maneuvering of a stacked dolly or cart.

S demonstrates how to lock or block wheels of a dolly or cart.

S loads each of the following:

- bulky, light objects--distributing objects properly for safe passage through narrow openings
- small, light objects--limiting load size to prevent objects from bouncing off while dolly is in motion
- large, heavy objects--keeping load low for balance
- small, heavy objects--keeping load low for balance
- dissimilar objects--giving consideration to their weight and size in order to prevent damage
- perishable items--limiting the number of layers to avoid damage

S unloads items, placing them in low, stable piles, in designated areas, or on distribution or shipping table.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to (1) load and (2) unload hand-operated and mechanically operated dollies and carts with a large number and variety of objects. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Moving Heavily Loaded Dollies and Carts

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S moves dollies and carts with various loads up and down a grade of two-inch maximum elevation per foot. Ss assist each other if necessary.

S moves carts and dollies through a maze that has been obstructed with manikins to create cross aisles and through doors that have been blocked with cardboard boxes. Several Ss are used to simulate heavy traffic conditions.

S demonstrates moving heavily loaded carts over rough, slippery surfaces. S takes extra care when moving the carts so as not to injure anyone or break or damage anything.

S pulls rather than pushes cart if required.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to move hand-operated or mechanically operated dollies, which are heavily loaded, up and down grades, over rough surfaces and waxed floors, through aisles and doors. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Stocking Shelves

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S maintains an ample supply of materials on shelves for convenience of customers and service men, including:

- Engine oil
- Transmission fluid
- Windshield cleaners
- Crankcase and fuel tank additives
- Tires, batteries and accessories
- Windshield wiper blades

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to keep shelves stocked neatly and orderly. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Refilling Display Cases

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S explains that display cases, such as store shelves and store counters, must be refilled before supplies are depleted.

S displays merchandise attractively. S refills partially depleted stock, moving remaining items to front, new items to back of case. S stresses that display cases are generally refilled from back and cleaned as required.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to refill display cases. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning Toilet Bowls and Urinals

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S explains that toilet bowls and urinals require daily cleaning.

S, wearing rubber gloves, carefully cleans inside of toilet bowls and urinals with toilet brush and aerosol disinfectant cleaner.

S wipes outside with sponge dipped in disinfectant cleaner.

S carefully rinses toilet bowls and urinals.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to clean thoroughly toilet bowls and urinals. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning Washbasins

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S explains that washbasins and fixtures require thorough daily cleaning.

S points out that drains must be cleaned periodically with a drainpipe cleaner to keep them sanitary.

S cleans washbasins with powder cleanser, aerosol disinfectant spray and sponge. S rinses washbasins and fixtures thoroughly, and dries them with a cloth or paper towels.

S, wearing rubber gloves, adds measured amount of drainpipe cleaner to drains, according to manufacturer's instructions.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to clean washbasins thoroughly. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Cleaning and Filling Washroom Dispensers

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S explains that various washroom dispensers must be refilled before they are empty or almost empty.

S carefully unwraps prefolded paper towels. S refills paper towel dispensers, ensuring that bottom sheet protrudes from each dispenser and that towels are stacked evenly.

S carefully refills soap containers with liquid soap.

S applies metal or aerosol cleaner to surfaces of dispensers. S thoroughly wipes and dries dispensers with cloth or paper towel.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able properly to (1) refill, (2) clean, and (3) dry washroom dispensers. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Sweeping and Mopping Floors and Walks SERVICE-STATION ATTENDANT

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S sweeps floor with hair broom, using pushing strokes of two or three feet. S takes care to clean corners and tight spaces.

S scrapes heavy debris, such as gum, from floor.

S dips mop into cleaning solution, wrings well and mops in four to six arcs, pressing down on dirty spots.

S mops from windows or farthest point toward door.

S steps backward as he mops to avoid walking on cleaned area.

S uses narrow push broom and employs a pulling motion rather than a side-to-side motion when cleaning walks and narrow spaces.

Safety Considerations: Keep hands away from wringer except to press handle
Observe caution regarding overhead lights when lifting mop from wringer
Rope off wet floors
Don't leave broom standing against wall

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) sweep floors, walks and narrow areas, (2) remove heavy debris, such as gum, by scraping, and (3) mop floors, walks and narrow spaces. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S checks whether hand scraper is properly sharp.

S correctly positions hand scraper on a wood surface and pushes it with the proper pressure in the direction of the grain.

S puts on a respirator and explains why its use is necessary when working with a machine scraper.

S moves the machine evenly over the wood surface in the direction of the grain to prevent ridges and other irregularities from forming.

Safety Considerations: Use respirator when working with a machine scraper

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to scrape floors and other wood surfaces to the prescribed finish with (1) a hand scraper and (2) a machine scraper. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Hosing Floors and Walks

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S explains why it is necessary to sweep floors and walks thoroughly with heavy bristle broom before hosing them with strong spray.

S sweeps floors and walks with bristle broom.

S hoses cleaned area with concentrated spray. S directs spray toward drain location, removing remaining dust from floor or walk. If there is no drain, S hoses dust away from center of floor or walk, directing spray at least six feet ahead of him to avoid being splashed.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) sweep and (2) hose floors and walks. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Maintaining Service Station Exteriors and Service Areas SERVICE-STATION ATTENDANT

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S spreads absorbent material over oil spills and grease spots.

S scrapes accumulated debris from traffic areas.

S sweeps service area and deposits sweepings in appropriate container.

S wipes grease, oil and smudges from enameled dispensing pumps and display racks.

S clears ice and snow from outside service area in winter.

S refills water containers and wiper dispensers when necessary.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to maintain service station exteriors and service areas by (1) cleaning up oil spills, (2) removing debris, (3) sweeping service area, (4) cleaning enameled surfaces, (5) clearing away dangerous ice and snow, and (6) maintaining a ready supply of water and paper towels. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Care of Parking Areas

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S explains that a parking lot must be kept clean and free of hazardous materials, such as broken glass and nails, to prevent damage to tires and preserve a neat appearance.

S scrapes gum and similar hardened materials from tar and cement surfaces, checking for and removing nails, pins, cans, bottles, etc. S, with a group if necessary, sweeps parking lot with wide bristle broom, using short, firm strokes. S sweeps debris onto shovel and carefully deposits it in waste container. S does not sweep debris into drains to avoid clogging them.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to maintain a parking area by (1) scraping gum and similar hardened materials from tar and cement surfaces, (2) checking for and removing sharp objects, (3) sweeping area, and (4) removing debris. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Personal Hygiene and Proper Dress

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S discusses daily rules of personal hygiene which include:

- Taking bath or shower
- Grooming hair and trimming nails
- Using deodorants
- Shaving regularly
- Using cosmetics appropriately
- Cleaning teeth correctly
- Washing hands after using bathroom facilities

S discusses proper dress for males (if relevant):

- Clean sturdy shoes (no canvas or open type)
- Clean underwear
- Clean trousers
- Clean shirt
- Uniform, coveralls, gloves (as required and/or supplied by employer)

S discusses proper dress for females (if relevant):

- Clean, sturdy shoes (no canvas or open type)
- Clean underwear
- Appropriate dress, blouse and skirt, or pantsuit
- Appropriate hosiery
- Uniform, coveralls, gloves (as required and/or supplied by employer)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) follow the daily rules of personal hygiene and (2) dress as required and/or appropriate for working in indicated areas.

Note: T will evaluate periodically whether S continues to manifest this behavior.

A Shock-Absorber Installer

- performs the following major tasks:
    - removes and replaces front and rear shock absorbers
- is required to work overhead under motor vehicles
- is required to wear a uniform while working
- works usually independently of other workers
- works under periodic supervision
- works usually indoors in an environment that is often cramped

TOPIC: Working in Automotive and Auto-Body Repair Occupations

SHOCK-ABSORBER INSTALLER

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S describes work activities in various automotive trade areas which he has visited, seen on film or read about.

S describes how to guard against safety hazards when working in automotive and auto-body repair shops:

- Hold and use electrical equipment correctly; turn equipment off when not in use
- Wear face mask and safety goggles for protection against dust
- Do not brush against, strike or grab objects, to avoid injury from sharp metal edges
- Wear sturdy, oil-resistant shoes to avoid slipping on floors
- Wear face mask and safety goggles, use explosion-proof spray booth if possible, and do not smoke when working with toxic and explosive fumes

S discusses habits a worker must have in order to work safely and productively.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to train and work safely and productively in automotive and auto-body repair occupations.

Note: T will evaluate periodically whether S continues to manifest this behavior.

TOPIC: Removing and Replacing Front and Rear Shock Absorbers SHOCK-ABSORBER INSTALLER

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S points out the different kinds of end fittings found on shocks.

S removes upper fittings first.

S places parts in a secure spot in order of removal.

S removes lower fittings next.

S lowers shock through bottom.

S places parts in a secure spot in order of removal.

S compares new and old shocks to determine which end is top of shock.

S installs new bushings on new shoes.

S installs new shock in reverse order of disassembly.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) remove shock from top to bottom, (2) place parts in secure place in order of removal, and (3) install new shock in reverse order of disassembly. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S unloads cases from truck and stacks them on cart or dolly. S demonstrates correct posture in lifting and proper procedure for loading different items from truck onto moveable carts and dollies.

S unloads truck with a supermarket gravity-type roll conveyor. S squarely places a case lengthwise on the conveyor, taking care not to push the case at an angle, as it will slide off.

S loads truck efficiently by placing large, heavy items on bottom and light, fragile ones on top, giving careful consideration to proper balancing of load.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to (1) load and (2) unload a truck. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Loading and Unloading Hand-Operated and Mechanically Operated Dollies and Carts

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S points out the following types of objects: light and bulky, light and small, heavy and large, heavy and small, and perishable. S makes suggestions concerning the sorting and loading of these objects onto hand-operated and mechanically operated dollies and carts.

S sorts objects into groups of similar types.

S discusses the importance of distributing loads evenly for stability, and of limiting overhang and size of load for safe maneuvering of a stacked dolly or cart.

S demonstrates how to lock or block wheels of a dolly or cart.

S loads each of the following:

- bulky, light objects--distributing objects properly for safe passage through narrow openings
- small, light objects--limiting load size to prevent objects from bouncing off while dolly is in motion
- large, heavy objects--keeping load low for balance
- small, heavy objects--keeping load low for balance
- dissimilar objects--giving consideration to their weight and size in order to prevent damage
- perishable items--limiting the number of layers to avoid damage

S unloads items, placing them in low, stable piles, in designated areas, or on distribution or shipping table.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to (1) load and (2) unload hand-operated and mechanically operated dollies and carts with a large number and variety of objects. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Moving Heavily Loaded Dollies and Carts

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S moves dollies and carts with various loads up and down a grade of two-inch maximum elevation per foot. Ss assist each other if necessary.

S moves carts and dollies through a maze that has been obstructed with manikins to create cross aisles and through doors that have been blocked with cardboard boxes. Several Ss are used to simulate heavy traffic conditions.

S demonstrates moving heavily loaded carts over rough, slippery surfaces. S takes extra care when moving the carts so as not to injure anyone or break or damage anything.

S pulls rather than pushes cart if required.

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able safely to move hand-operated or mechanically operated dollies, which are heavily loaded, up and down grades, over rough surfaces and waxed floors, through aisles and doors. This objective will be met if S performs satisfactorily the above activities within a period of time predetermined by T.

TOPIC: Personal Hygiene and Proper Dress

SUGGESTED INSTRUCTIONAL ACTIVITIES:

S discusses daily rules of personal hygiene which include:

- Taking bath or shower
- Grooming hair and trimming nails
- Using deodorants
- Shaving regularly
- Using cosmetics appropriately
- Cleaning teeth correctly
- Washing hands after using bathroom facilities

S discusses proper dress for males (if relevant):

- Clean sturdy shoes (no canvas or open type)
- Clean underwear
- Clean trousers
- Clean shirt
- Uniform, coveralls, gloves (as required and/or supplied by employer)

S discusses proper dress for females (if relevant):

- Clean, sturdy shoes (no canvas or open type)
- Clean underwear
- Appropriate dress, blouse and skirt, or pantsuit
- Appropriate hosiery
- Uniform, coveralls, gloves (as required and/or supplied by employer)

PERFORMANCE OBJECTIVE: Given appropriate/indicated equipment, S will be able to (1) follow the daily rules of personal hygiene and (2) dress as required and/or appropriate for working in indicated areas.

Note: T will evaluate periodically whether S continues to manifest this behavior.